Topic: Value of CSE 12

Displaying posts 1 - 30 out of 37.

- **1**
- 2
- Next

Gary's CSE 12

Please use this discussion to share thoughts on the value of CSE 12.

over a year ago · Delete Post

Mabel Zhang

CSE 12 was a big help on my understanding of the C language before shooting into CSE 30. At the pace of CSE 30, if not for CSE 12, I would not have come to love C since CSE 30 till today.

Pointers at the time of CSE 12 was astronomy, but it became much friendlier after more practice. After CSE 12 was over, for the couple of summer months during which pointers probably got digested, it suddenly became a breeze to use in CSE 30, with no further practice. It was magical, and it certainly is a powerful thing qu'on doit adorer.

CSE 12 also provided the ONLY 2 weeks of C++ in the CSE curriculum and my undergraduate career (excluding outside experience). I've just heard this week that, besides CSE and ECE, other engineering majors, like MAE, have some type of C++. That's a shame. How do they have C++ while we don't even have C++? What's wrong with C++, it gets you jobs, it also is a great tool in higher level graphics.

Despite the difficulty of the class at the time, many students afterwards cite CSE 12 as one of the most important classes in CSE during their post-internship presentations.

I have not taken the new CSE 12, obviously, but I can't imagine why they'd replace the original CSE 12, one of the very few classes using and analyzing more than 1 language, with a Java class. Everything is Java... I personally think early exposure to more languages is more healthy.

Overall, CSE 12 was a valuable class for me. I especially liked the pictures of heap, stack, etc., that were drawn in class and a bunch more during midterm and final review sessions. Those were very visual and helped a lot in the understanding of things. They also helped build up for CSE 30's drawings. Ha. Those are certainly one important reason that I can repeat the drawings today :)

over a year ago ·

Mark as Irrelevant

Tyler O'Neil

I know people in other majors who, when asked about their coursework, will smirk and call their classes a joke. Without being aware of it, they're projecting to everyone that their degree isn't serious or professional. As a student who wanted to do challenging work worthy of being proud of, CSE12 was a great chance to test myself. After 12, I think the unanimous opinion of students is that computer science is anything but trivial and personally, I am very proud of passing that class. When I talk to people about what I do, I say it with pride.

over a year ago ·

Mark as Irrelevant

David Zhang

My 2 cents:

I started off with no idea what I would be doing. This bioengineering major sounds interesting, right? Ok, I guess I'll take that, test the waters as I go, and see how I like it. I'd imagine that this is the state that most freshman are in when they enter college. Two years into the major, I was nearly done with my prerequisite classes (organic chemistry, physics, biology, metabolic, etc...) and watered down versions of what to expect after graduation. At this point, I still haven't had the slightest idea what the major was about or what I'd be able to expect post-graduation. Two years into things, when I finally started meeting the requirements for some upper division classes, I was bummed to find out that this is not what I'd wanted to do. Crap! Ok long story short, I was annoyed that it took 2 years to expierence what the BioE field was about... One of the things that I really appreciated about CSE12 is that it's a good way of getting a real look at what the field is all about early on. It's that class that made me think "YES...this is the major for me", solidified my decision to switch majors, and haven't looked back since.

Also, I see a lot of people mentioning that the C++, trees, stacks, pointers, etc. are useful and they are. But on a more fundamental level, CSE 12 teaches students how programmers should 'think'. That is, programming exercises require a completely new mindset to able to trace through a program's execution, to be able to break complex problems down to smaller ones, to be able to think if X is going on then Y, Y could be potentially be the problem. Overall, CSE 12 is the best introduction to this kind of thinking. And more importantly, this is exactly what I use on a day-to-day basis in my job. Moreover, this mindset is probably one of the most important things that our team looks for when doing new college hires.

Overall, CSE12 is very similar to how I felt about my parent's advice. When you're going through it, there's definitely tough moments/disagreements ("why are you nagging me?" or "i don't want to do these chores" or "why are you making me do X") and it's hard to see the value when you're frustrated about the stack program crashing for the 20th time. I don't have those same complaints now and realize how much its contributed to my successes.

Mark as Irrelevant

Gary's CSE 12

I had three really nice interactions involving CSE 12 within the past 24 hours:

- Yesterday, when I told a former CSE 12 student that CSE 12 was my gift to students, he told me it was his gift to his entire UCSD experience.

- After giving a guest lecture on data structures to the software engineering class, one student that was not my former CSE 12 student came up to me when class ended to tell me that he wanted to enroll in CSE 12 if I were to teach it again. When I asked him if he already had taken CSE 12, he said yes, but wanted to take it again from me.

- After doing well on his job interview, a former tutor told me, "I can't thank CSE 12 enough actually. I felt thoroughly prepared for the questions due to the background in data structures I got from you!"

Daniel D Hoffman, Sarang Ratanjee, Ankur Jain and 23 others like this.
Asif Chauhan I can identify w/ these sentiments, CSE 12 was a beast!
January 13 at 4:29pm

Devin Barr cse12 was where cse began for me
January 13 at 4:35pm · Like · 2 people

Brian Farwell For me it was the class where I realized I could actually be a software engineer. When it was over, of course. ;)
January 13 at 4:48pm

Shivan Bindal agree with all of the above!
January 13 at 5:14pm

Abbie Whynot I agree with Devin!
January 13 at 6:23pm

Raj Altenhoff Yep, I always go back and review my CSE 12 handouts before a job interview!
January 13 at 7:15pm

Maytal Dahan Agreed, CSE12 was tough but fun to take and fun to TA
January 13 at 8:37pm · Like · 1 person

Cathie Olschanowsky It was my favorite class, hands down. If I do ever teach, I think this is one of the classes I would really enjoy.
January 13 at 9:39pm

Rochelle Lakey You deserve those accolades Gary. U trained a whole nation of engineers! Thank you!
January 16 at 6:49am via Facebook Mobile

Sarang Ratanjee Definitely agree with everyone above, CSE 12 being taught by Gary was a great experience!

January 20 at 11:25am

Gary Gillespie Thanks everyone for the great comments! I'm glad that CSE 12 is still alive with all of you!!!
January 26 at 10:22am

about 5 months ago ·

Brendan Duncan

Taking CSE 12 with Gary prepared me for internships in industry. Employers expect you to understand C, C++, memory management, and pointers. Gary's course was the only one in the CSE core courses that dealt with C++, memory management, and generics. I worry that current CSE students may lack this knowledge when they get their degrees.

Gary's course was also the only place where we compared the advantages and disadvantages of C, C++, and Java. Not only did we have in-depth discussions in class, but we also programmed data structures in all three languages, which did more to solidify the differences than if the languages had been split into several different courses.

The intellectual excitement of learning these useful skills and the sense of accomplishment from finishing the challenging and rewarding assignments inspired me to change my major from math to computer science. Not only did CSE 12 prepare me for industry work, but it's started me down the path to a successful academic career as a graduate student in computer science.

about 5 months ago ·

Submit

Evan Worley

As a transfer student, CSE12 was my first computer science course at UCSD. Additionally, it was my first "real" computer science course taken anywhere. While my time at UCSD was full of challenging courses, CSE12 was the first time in my academic career that I felt truly challenged. For those short 10 weeks I was dreaming of pointers to pointers to function pointers. Gary's class took me into a new world which would ultimately lay the foundation for the rest of my career.

Aside from the curriculum itself, CSE12 was the platform on which I defined the rest of my time at UCSD. After completing the course, I was invited to come back as a tutor. I felt honored to tutor along side those amazing students who previously tutored me, and I eventually became the head tutor. It was in this network that I felt truly privileged. These amazing students, known as the CSE12 tutors, were to be my classmates and partners for the rest of my time at UCSD. I felt like I had an unfair advantage in my courses.

I am very grateful to Gary for his dedication to CSE12, and for his ongoing efforts to cultivate the network of tutors. His efforts were paramount in creating the amazing experience that I had at UCSD.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Nilofer Motiwala

CSE 12 helped me tackle Advanced data structures & Compilers & my job & interviewing others !

The first CSE 12 class was intimidating. The handout was in 8 point font (or smaller?), 4 pages per side. It was the stack assignment.
Still remember that feeling. However Gary's teaching style, discussion sections, lab time with him & tutors, helped me break down the task,
ask the right questions and understand what is happening behind the scenes.
The background in pointers, pointers to pointers, function pointers, memory management, inheritance and how to debug, laid a solid foundation.
Not only were these concepts critical in CSE 100 & in compilers, but they served me well in fielding internship interview questions at Qualcomm and Clinicomp .
Today when I interview other software engineering candidates looking for internships or their first job or even with few years of experience, I expect them to know their data structures & memory management & behavior during inheritance. When they don't get that right, I wish they had a class like CSE 12 & a teacher like Gary.
Often, when explaining to others about setting the free'ed pointer to null, I say : "When you sell your car, you have to throw away the key!"

If there is one thing I would want to change about CSE 12, its prolly the font size on the first assignment :)

Thanks Gary! You are the person behind my CSE career success.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Madiha Mubin

I loved CSE 12, so much that I tutored for that class for 7 quarters. Here are a few reasons why, every quarter even with taking 5 courses, I returned to tutoring CSE 12.

CSE 12 was the only class that dealt with C++ (at least until June 2010 when I graduated). I know that an upper-div graphics class uses C++, but not everyone is interested in graphics and if you are not, then you don't have any other place to learn C++, then just by using online resources or books. Several companies like Google, Bloomberg, Qualcomm (naming few of those that specifically required C++ knowledge) ask questions about C++ templates, constructor, destructor, operator overloading and concepts that are special to C++.
I still remember the time when I reviewed all of my C++ notes from CSE 12, looked through the last two assignments of the class in C++ before my interview for full-time position at Bloomberg. I was asked to implement tree-traversal in C++ and obviously, it could not have been easier since we looked at tree structures in so much detail in CSE 12.

CSE 12 was no doubt challenging - 10 weeks, 7 assignments (old version) 9 assignments (new version) but I enjoyed it a lot. It was because I was not the only one who was struggling with the concepts. Everyone was, and Gary and the tutors were aware of it. That is why there were many tutor hours and tutors were so passionate about helping the students solve problems. As a tutor and a student of CSE 12, I enjoyed discussing differences between Java Generics and C++ templates with students and other tutors - a concept that I think students will not be able to understand without CSE 12.

The diversity of concepts ranging from C to C++ to Java talked about in CSE 12 made me return to tutor that class every quarter. Learning recursion, memory management, data serialization and understanding the nitty gritty details of pointers is not easy and I took advantage from revisiting the course material over and over again by tutoring. Every time I thought that I had seen all possible ways of solving an assignment, I would find a new implementation that some student came up with. Such an invaluable learning experience!

At grad school, I feel that a solid foundation in C, C++ and Java has made me a good candidate for Research and Teaching assistant positions for several courses. Not only that, every internship interview I get pretty much starts with a discussion about data structures and algorithms!

Above all, CSE 12 taught me to be patient with my assignments, a quality you definitely need for classes like Compilers (131) and for pretty much every course in Grad school.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post
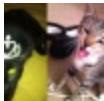
Sarah Esper

Coming in as a freshman I didn't know ANYTHING about computer science (I was going to be a doctor...) I took 8A and 8B my first year and started off my second year with CSE 12.

Although sometimes I felt that I was not prepared (thinking I didn't know as much as those people who had spent the better part of their lives doing computer related activities where I hadn't) I still managed to pull through. I have to say that the reason I did was the community that CSE 12 helped build. There were SO MANY tutors that were always in the lab willing and able to help. There were even times when I would get stuck and there were no tutors and I was able to stand up, say "I can't figure out this tree!", and someone would come running over to help :)

It was a tough class, a lot of information, but with the power of the tutors and fellow students I was able to succeed. So much so, that when the quarter ended Gary Gillespie gave me the opportunity to give back to that community and power by

becoming a CSE 12 tutor.

I will admit that I probably learned some things I might have missed by tutoring, but that is what they always say "you don't really know something until you have to explain/teach it to someone else" and let me tell you, that is definitely true.

Up until this point I was still a little unsure if I was cut out for this major, but when Gary asked me to become one of his tutors it gave me the confidence I needed to eventually become what I was meant to. Since then I have tutored for most of the undergraduate courses, I have helped create a new organization for volunteering to make the tutor force even bigger and have been accepted into the masters program at UCSD in CSE. Although there are many factors that have lead to what I am doing now, that confidence of being able to succeed in a tough course and then tutor for it really helped me get started.

:)

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Maritza Borunda

CSE 12 - the reason why I stuck with Computer Science as my major upon transferring to UCSD, back in the Fall of 1994. I was one of his first students :-)

The change of pace from semester to quarters was a huge shock to me, the material was flying by, I had never done OO programming before, had to go into an intermediate Java class as part of the transfer agreement and I almost gave up. Gary was the most compassionate and understanding instructor - he held special office hours for those of us who needed them so we could learn OO theory, he stayed late in the lab to explain how the compiler worked. And above all - he never, ever treated me like an idiot. He understood that all I needed was a bridge to transition and he provided it. I went on to graduate and have a successful career.

I only recently found Gary again and had the chance to personally thank him for all he did. I am happy to see that he is still teaching, except that I don't understand why CSE 12 went away. Bring it back!

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Allan Souza

No Sweat No Gain
CSE 12 was definitely challenging yet it was one of the classes that improved my Computer Science skills the most. Those many hours in the lab as a student and later as a tutor were also the beginning of great friendships that I now carry with me after graduating from UCSD.

CSE 12 was the only place where I was exposed to C++ during my UCSD career. I worry a bit for the students who are now taking CSE12 exclusively in java. The knowledge of C/C++, pointers, memory management, memory layout, differences between languages, etc, constituted a solid base for my later coursework. Also when looking for jobs a number of times I had interviewers ask me questions straight out of CSE 12.

After graduating from UCSD I landed a job at Google and I regard CSE 12 as the beginning of that achievement.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

·

Nadav Ben-Haim

CSE 12 was a great course which laid the foundation for my academic career at UCSD. It was challenging, and had substantial C/C++ topics covered. C++ is currently the only language I program in today. I have heard much about other universities and curricula that are abandoning C++ as a language to be taught, so I'm thankful that I was in the fortunate group to have learned about pointers and the like.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

·

Puja Ramani

CSE 12 was instrumental in taking me from a student struggling with the demands of the CS major to one who truly enjoyed computer science. I went from mediocre at best to becoming skilled enough to become a tutor for the class.

I can't thank Gary enough for teaching several important skills:

1) learning the fundamentals of a science well enough to teach it by using metaphors to simplify challenging problems

2) Creating a great community of tutors that remain lifelong friends
3) Coaching us on how to effectively mentor and develop others through his tutor program
4) Prepping us for job interviews and helping his students in every way possible

Even though my career interests have shifted from pure programming to other business roles, the learnings and experiences from Gary and CS12 will always be relevant in my professional toolset.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

John Quaresma

I've always felt that this class is a very accurate predictor of whether software development is the right career path for a given student.

Succeeding in this course means:

A) Firm understanding fundamental computer science data structures
B) Working knowledge of different programming language basics
C) Strong OOP fundamentals

This class was and is the backbone of my future growth in Computer Science and the software industry.

Thanks Gary!

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Devin Barr

I first took CSE 12 as a Freshman in Revelle College, with a declared major of CS. Having recently entered college, my perception of college academics was limited to mainly GE's with a few classes that counted towards my major. I was living on campus and drifting through easy days, missing classes and procrastinating as was convenient..

I like to think of my college experience before CSE 12 as unconscious. It was comfortable and I didn't think twice about the difference between an A and a B. With computers, as long as I could hack out a solution in a short amount of time, I was happy.

I didn't pass CSE 12 my first time taking it. I literally hit a wall, thinking I thoroughly understood data structures and how to solve programming problems. Needless to say, my eyes were abruptly opened to the contrary. I retook CSE 12 the following quarter initially adopting a cynical and contemptuous outlook. As the quarter went on however, my attitude drastically changed as I retraced my unconscious footsteps from the previous quarter. There was so much to learn. And the best part about it was that all the necessary resources were incredibly availible.

Looking back, I realize that this class - CSE 12 - was where I learned how to succeed in college. Studying habits, attending class, communication with Professors and TAs and Tutors... I didn't know what these things were before CSE 12.

While tutoring for CSE 12, I realized that other students shared my initial approach. Helping others avoid the mistakes I made and seeing their understanding was one of the most rewarding college experiences I've had. Only after visiting all student-states (taking the class, not passing, passing, tutoring) was I able to realize that this class was absolutely essential for all that I've done at UCSD.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Tarak Patel

It has been 12YRS since CSE 12. I don't use the programming I learned in the class.. but I use everything else that was in the course materials from Gary.

This was the class where I first put out of box thinking in practice. All the tutor positions were filled, so I asked to work as volunteer. A simple idea resulting from determination to be part of the "tutor team", to give back to the next batch, to make good earning, to build networking and to get the recommendation for future job.. Gary embraced this idea and offered me a position, probably violated few unwritten rules of UCSD.

Looking back, this was the early assurance of can do attitude I carry today. It was the first experience of working with a great team and where I first recognized people with passion and talent.

So while the stack, queue and tree are in the distant memory.. The self confidence, out of box thinking and networking with passionate people.. stays in the forefront of my every day life.

Danke aus Deutschland

about 5 months ago ·

Mark as Irrelevant

Coram Bryant

My appreciation for the value of the CSE12 experience provided by Gary continues to expand with each passing year. I will only briefly echo the myriad testimonials in this group regarding the unique opportunity to engage in a truly foundational course, one which challenged me to achieve a deep understanding of computer science fundamentals and sustained me throughout my undergraduate studies and subsequent career. More so, I feel an increasingly profound appreciation for Gary's dedication to fostering a vibrant educational community in the Computer Science department at UCSD. Through his tireless efforts to mentor promising tutors, who in turn mentor their near peers, Gary has established a robust framework for proximal development, one which enables students to safely extend beyond their comfort zones into personally uncharted learning territories. Gary's realization that learning is enhanced by legitimate participation in a community of practice has proved beneficial to countless students, the Computer Science department as a whole, and the institutions that follow.

Thanks, Gary!

about 5 months ago ·

Mark as Irrelevant

Elliott Slaughter

Everyone I've talked to who took the original CSE 12 is proud to have taken the class. The class was something of a transition point for a lot of people; passing the class meant that you knew enough about programming to be capable of writing nontrivial programs. Many of my friends and I started our job searches for internships after taking 12, since 12 had given us the confidence that we had marketable skills.

It seems absurd that an introductory class that covers all of C, C++, and Java, in 10 weeks, could be in any way sane. But while I must admit that I have not taken the new curriculum, it seems to me that have a fast introduction to C in 12 followed by a stronger review of C in 30 is preferable to no introduction in 12 and an even steeper learning curve in 30. This is made even more extreme by the new focus on embedded system in 30, which make traditional debugging difficult. In my opinion, students deserve to be introduced to C on traditional hardware before they're asked to use it in embedded systems.

Another part of the old 12 that really deserves to be discussed is debugging. In the old 12, debugging was nontrivial. I took 15L in the first year it was offered, in parallel with 12. I learned a lot about debugging in 12, and almost nothing about debugging in 15L. The difference is that the bugs in 15L were mostly contrived, whereas the bugs in 12 were real mistakes made by the students themselves. Often, bugs in 12 were the result of faulty knowledge of C and pointers, and resolving these bugs required reinforcing one's knowledge of the course material. As such, the bugs in 12 not only provided a bigger debugging challenge for students, they actually were an important part of learning the course material in the first place.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Sid Gidwani

Taking and tutoring CSE 12 was far the best CS experience I had in college. Gary's method of explaining the differences between 3 different languages and his approach to conveying the basics of memory management in C/C++ are skills that are relevant to me to this day, 10 years later. As an example, yesterday, when debugging my iphone code that had memory bugs in it, I went back to drawing out the pointers on the stack and the heap as I learned to do in CSE 12 and figured out the issue in about 20 minutes. Something that would have taken me a few days had I not taken CSE 12.

While taking the class often seems brutal and overwhelming, its true value is realized when you're out in the real world solving real, unreproducable crashes on customer machines. This is when you realize that most contrived programs that you wrote in college haven't prepared you for this. CSE 12 as taught by Gary is a shining exception that gives UCSD students a leg up over the competition. Bring it back!

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Abbie Whynot

CSE 12 was the class that really got me excited about my major (CS) and inspired me to join the CS tutoring crew. It was the first class I had that had me spending endless hours in the dungeon basement of AP&M. It made me feel accomplished and at one with my fellow nerds; it was where I really started to grok it all.
I loved that course covered C, C++ and Java. For me it was my introduction to pointers! The tutors were so helpful and wanting to pay that forward I became a tutor for CSE 12 the following quarter...that led to tutoring for 5, 30, and compilers and led to many lasting friendships and fun times! To this day I LOVE debugging, and the roots of that love are buried deep in my experiences trying to figure out what the heck was going wrong with my data structures!!!
Gary's passion for the subject matter, analogies, and sense of humor made the class truly enjoyable. It was not easy, you had to work hard for your grades, but I feel like I got so much out of it! Its truly a shame that its no longer offered!

@Sid: I was doing the same thing yesterday...love drawing stack frames!

about 5 months ago ·

· Report · Delete Post

Raj Altenhoff

CSE 12 was the most useful undergraduate class that I took. It was extremely challenging but also extremely rewarding. CSE 12 (and Gary specifically) taught me with great detail how to program in C, C++, and Java. Without CSE 12 I wouldn't have had any exposure to C++ (including templates), Java generics, stdin/stdout buffering, and viewing datafiles on disk. It was also my first introduction to pointers, bit twiddling, recursion, structs, polymorphic behavior, and access rights. Students who didn't take this class are at a disadvantage!

My CSE 12 experience has proven valuable in my job search. The course material invariably seems to come up when an interviewer is assessing my technical competency. I actually study my CSE 12 notes before going on an interview! I have never done this with the material from any other class.

So I say thank Gary! Thanks for teaching us to be real programmers in CSE 12. Hopefully other students will get the opportunity to learn the fundamentals of programming in CSE 12 just as I did.

Raj

about 5 months ago ·

· Report · Delete Post

Tri Le

There are 3 important sets of things I gain from CS12 that helped me till today: knowledge, network and work like environment.

- I could not agree more with everybody here about how the knowledge in CSE12 becomes fundamentals for pretty much everything CS related later on. To be honest, it was overwhelmed at the time but then it turned out to be a well preparation. matter in classes, interviews, work keep coming back to those basic things that introduced in CSE12. One things I amazed is that I can related myself to 90% of the cases described in this discussion board, and I am sure other people here would feel the same.

- From the moment I stepped in the CSE12 lab, I made some friends, by the end of the quarter, I already knew who would be in my graduation class. I took CSE12 the first quarter I came in and tutored it 6 quarters after that till my graduation. I

could say I knew almost every undergrads students at that time. This network become so powerful once you are in the industry. It provided me with a lot of opportunities from internship to full-time position.

- In CSE12 I learned a lot of things still applied to my work. I got to read about something new I've never heard before, learned about it as fast as I can and jumped the project. I don't want to cancel out the effort of other classes but CSE12 was one that gave me the most pressure besides the two compilers and operating system classes. Team work, extreme programming, work under pressure are among the the things that came when I took CSE12. Also, trying to explain things to other people are the best way to concrete our knowledge. As a tutor I also received mentorship from Gary. These kind of learning really come out of the classroom and become into your work life fundamentals.

I absorbed everything above without even knew it and now when I looked back at it I really appreciate Gary for giving me a very fulfilled CSE12 class. Please bring it back for the future UCSD Computer Science students.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Jimmy Lam

My recent experience.
I am a recent graduate from UCSD and I just start working. During my job hunting, I had numerous interviews, the most questions I got is data structure questions as it is the almost basis of every software. Fortunately, I have Gary's CSE 12 notes. I impressed quite a few interviewers by the strong foundation I have on data structure. I never feel nervous for interviews because I know that I am going to ace any data structure questions they ask (a main area!), actually pointers, memory allocation and leak as well. It is a disappointment for knowing that the future CS students do not have the chance to learn data structure from Gary anymore. It is a loss both to the school and students. Honestly, I think CSE 12 helps me a lot better than even a lot of upper divisions classes. I believe if UCSD wants to give a solid education to CS students, (not a degree that anyone can get without much effort and ends up suffering in job market and disappointing potential employers, in worst case, hurting the UCSD CS reputation), the department should consider reinstall Gary's class.

Just out of curiosity, how often everyone encounter questions on advanced data structures?

Chun

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Jason Zhao

I liked CSE12. Yeah it was dressed in blue overalls and looked like a heck alot of work, but that's the face of opportunities your are looking at.

How about another? Taking CSE12 is kind of like running, it feels darn good afterwards =)

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

David Yee

Taking CSE 12 was a very valuable learning experience for me. In fact, of all the classes I've taken at UCSD, CSE 12 was the most important in securing an internship and full time job after graduation. The presentation of data structures, C and C++ provided me with the knowledge to effectively answer interview questions and make significant contributions at my current job. The presentation of material in CSE 12 was highly effective in teaching programming principles to students.

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Vaché Shirikian

CSE 12 and its mastermind, Professor Gary Gillespie, was by far the most influential class of my life. It was the turning point in my CS career and affirmed my desire to be a computer scientist. The challenging yet rewarding curriculum was the most thought provoking and memorable experience in my 4yrs at UCSD. I still reference my CSE 12 notes almost 7yrs later. I have nothing but good things to say about CSE 12, and I wish I had more time to express my strong feelings further. I also second most of the comments from other former students, CSE 12 stands out in my mind as the most influential CS class I ever took.

about 5 months ago ·

Mark as Irrelevant

Gary's CSE 12

When I created this fan page, I had no idea it would get as many responses as it has... it was more of an experiment to see if anyone else was a "fan" of Gary's CSE 12 as I was. I had no idea it would bring all these people from the past and present together like this!

Starting out in 12 after just finishing the CSE 8 series there were a lot of "Why The Face" moments (please tell me someone gets that!), because it felt like I was starting from scratch, and being used to a pretty full code skeleton from CSE 8A and B, it came as a bit of a shock. However, the class was set up beautifully, letting it be ok to fall flat on your face at first and then bring you up to good coding style and methods, giving you the chance to excel when it really counted. Covering three languages in 10 weeks while teaching data structures that the students have never seen, all while not causing almost every student to fail is no easy task for an instructor.

Gary's CSE 12 was definitely a challenge, but it definitely wasn't "too hard". Some have said it was a weeder class. Maybe, maybe not, but if a student really can't handle CSE 12, I think it's better that they know in their 2nd or 3rd quarter of school, than getting to an upper division class and realizing that they can't handle it. It was ominous, there were battle stories passed down that would frighten those that haven't taken it yet, but it gave those that passed confidence, it gave them the knowledge to clear some of the confusion coming in the next courses.

Aside from taking the class as a student, becoming a tutor for the class (the very last one!) was INCREDIBLY pivotal in my experience in this school. Sitting in on the course for a second time was very beneficial; the lecture was almost exactly the same, but everything made sense now! Nowhere else have I had that much fun teaching others, and being a part of the group of 30+ tutors gave me a sense of pride and belonging that I have never experienced before.

And now, it will all pass into legend...

-Brian Harrington

about 5 months ago · Delete Post

Thomas Finsterbusch

I could talk about how much I learned from Gary's CSE 12 (I landed an internship with Amazon in the beginning of my sophomore year, just one quarter after taking his class). Or how much confidence & leadership skills tutoring for Gary gave me (TA'ing as a PhD student at UT Austin is an absolute breeze now). Or how Gary's passion for helping students rubbed off on me (I'm now running a global nonprofit that helps university students launch their tech startups).

I could talk about all that, but I think the other alumni on this thread have already enumerated all the great things CSE 12 has done for them. What I'd rather focus on instead his Gary himself: truth be told, I have never met another teacher who cares more deeply about his subject and his students than Gary. He was my earliest and most meaningful relationship with a mentor for the majority of my time at UCSD, and I'm grateful to be able to call him a friend now. I can't thank Gary enough - he has had a huge impact on my life.

Personally, I think it's a crying shame that future UCSD CS students won't be able to enjoy the same opportunities Gary made possible for me as well as hundreds of other alumni.

Gary: thank you.
Thomas

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Sirvard Silvie Nshanyan

CSE 12 was the "shaker" of my academic life at UCSD. I have to admit that I came to the class under-prepared, over-ambitious and with a quarter schedule such that didn't permit me to balance one with the other. Needless, to say I felt overwhelmed in no time. But it was this feeling exactly that propelled me to rise up to the challenge, succeed in the course, and be proud of it! And it was this sequence of events that eventually led me into becoming a tutor for the class, at which point I was already so committed to CSE, I declared it as my second major, despite being only 2 quarters away from graduating as a Cognitive Science major. Furthermore, the confidence and knowledge I gained across all the many topics and programming languages that CSE 12 is infamous for, combined with Gary's sincere apprenticeship and example of unrelenting dedication, help me land my first industry internship, followed by another, and another... until I finally landed the job I was vying for, the job that allows me to live the life I dreamed of at one point... the life that started with CSE 12 changing my path once and forever!

Thank you Gary! Your vigor and commitment changes lives! :-)

about 5 months ago ·

Mark as Irrelevant

· Report · Delete Post

Topic: Value of CSE 12

Delete Topic|Reply to Topic

Displaying posts 31 - 37 out of 37.

- Prev
- 1
- **2**

Brian Lee

To this day, my experience with CSE 12 is invaluable. I don't know what I would be doing if I had not taken Gary's CSE 12. Having trouble finding any interest in computer science, I was telling myself that CSE 12 is the class that will indicate whether I should continue my study in CSE. It was something many college students encounter when they worry about their future and career. During the ten weeks of CSE 12, I truly learned what it meant to be a computer scientists and found myself enjoying the life of a CSE student. My goal and future also became more clear. I was not a stellar performer in class, but I always knew that there was Gary's Gang (aka tutors) in the lab. Although I had to pull my hair sometimes, I really enjoyed and built the foundation of my career. I was very lucky to take Gary's class.

After all, CSE 12 is the class led to my first job and the current one. I don't know how many times I thanked Gary and CSE 12 during the job interview when interviewers asked me to code a bunch of stuffs I already did in CSE 12. Plus, I still use all the problem solving skills and mindset I learned in CSE 12. :)

about 4 months ago ·

Mark as Irrelevant

· Report · Delete Post

Mark Mikhail

The gates of CSE 12 break you down, and makes you question "Is this major for me?" early on in your college career.

I just graduated and its the only class that stresses the differences of the big 3 programming languages (C, C++ and Java) in the lecture notes, and the programming assignments.

You build data structures given only function signatures in the 3 programming languages noted above. The assignments make you curse, but more importantly it makes you think, and once you solve your issues or figure out the algorithm -- it's gratifying.

More importantly, your mindset changes during CSE 12, and makes you analyze your code in depth, because you can't get your assignment to work without understanding the concepts and the code that goes with it.
You get a good taste of debugging stack traces.

The material in CSE 12 was a crucial starting point in getting my first software engineering internship. A good amount of my interview questions comes from CSE 12 material as noted by others above.

Although I feel some of the material could be watered down, because it's hard to absorb all of it. However, this is the nature of the CSE 12 beast.

If you're unable to figure it out the code, then there are a massive barrage of tutors to help.

A great way of learning about data structures is to actual program them as with most computer science concepts, and CSE 12 offers this.

Thanks "G" Man!

about 4 months ago ·

Isaac H.

CSE 12 was my first real Computer Science class, and it inspired me to join the CSE 12 tutoring family. It was the first class that made me stay up all night to finish some of the projects, and I felt very good about finish the projects even I had to stay up all night to do it.

This course covered the most fundamental knowledge of data structure. I really believe CSE 12 built me up as a software engineer and helped me to start my career path. After all, I still go back to my CSE 12 before my interviews or to interview others.

I believed Gary was the main reason why so many CSE 12 students became so successful in their career and personal life.

about 4 months ago ·
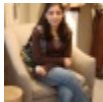
Maria Mubin

CSE 12 was one of the best parts of my CSE career at UCSD. It was through CSE 12 that I got my first job as a tutor which was the beginning of many great things that came along my way. Just the experience of being able to tutor and learn the important concepts was priceless. I made friends who will remain my lifelong friends and the appreciation and respect I received from my students and my peers for doing well as a tutor really helped my confidence and motivated me to do better.
Gary will always remain my best mentor because he advised and supported me during the times when I was denied my job just a few months before I was about to graduate. As an international student, that means leaving the country. However, it was through Gary's support that I applied to the UCSD masters program and today 2 years later I am about to graduate with another degree and 8 job offers and am joining Apple soon. :)
All those job offers came my way because the concepts of CSE 12 were so greatly imprinted in my mind. I took CSE 12 as a freshman 5 years ago and just a few months ago when I was asked questions about Stacks and Trees and overflow, the answers I gave were all because I was taught all that material during CSE 12. If I hadn't taken CSE 12 I dont think I would have made such a great impression on any of the interviewers.
Some people may think that teaching concepts at such an early stage is not worthwhile, but I completely disagree. You need to know these concepts early so you can perfect upon them over time and build new concepts and ideas on the basis of those important concepts.

I still feel that tutoring for Gary for those 8 quarters was a wonderful time of my career at UCSD which I will always cherish :)

about 4 months ago ·

Mark as Irrelevant

· Report · Delete Post
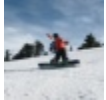
Jonathan Yung

A few years back, I knew I needed to take CSE12. As usual, with most of my classes, I would ask a few friends what they think of that class. I got "oh, THAT class!" and "the 'weed-er' class" and even "good luck…" Knowing I had no way out, I enrolled into Gary's CSE12 during one summer. Going into CSE12, I knew bits and parts of what programming is like, but I felt I did not know enough to do well; colleagues tell me this course is difficult.

In the class, I got to meet a few people who remain close friends today. We spent countless hours in the lab working on programming assignments and discussing the course material. This might sound like a normal computer science course, but the difference is Gary coming down to the lab with his students to help out after lecture and discussion. Immediately, I was amazed; almost all professors I have encountered went home or went straight to their offices after lecture, but Gary took the extra effort to engage with his students and to help out in the lab. In turn, I strongly believe Gary has good intentions for his students to learn a lot and to succeed.

Through many programming assignments, I did not always do as well as I hoped. I did not cover this case; I did not cover that case. Though it was highly frustrating at first, it began to make me think upon completion of all requirements—what if I do this? Would my program break? What if I input that? Would my program break? Like what people say, we learn the most from our mistakes. Prior to Gary's CSE12, I always got full credit on programming assignments for satisfying the given test cases. However, the big jump to CSE12, I had to think of my own test cases. I felt this was key in computer science. No one is going to constantly hold my hand to make sure I covered all the test cases; in the real world, I am on my own. This is one of the greatest values I took for Gary's CSE12.

The way Gary holds lecture promotes an interactive learning experience. First, he distributes handouts with sentences and blanks. During lecture, he helps students fill out the blanks. I feel this handout format forces students to attend lecture since the completed notes will not be posted online. The blanks allow students to think of the answer before seeing it. It is mind simulating and rewarding when you know the answer versus read the answer.

Yes, I do feel CSE12 was challenging, but that was exactly the reason I am still a Computer Scientist today. Completing CSE12 was like completing a marathon. A great deal of hard work during the process, but highly rewarding at the end. Honestly, after Gary's CSE12, I could confidently tell people my major.

Tutoring for Gary's CSE86 now, I feel the material is a great way for students to refresh themselves of the values they gained from his CSE12. I told Gary after the first lecture, "students should be required to take your CSE12 during their first year AND their last year." I explained how all ambiguity in CSE12 all just makes complete sense now. In turn, refreshing Gary's CSE12 material the second time before entering the real world is golden. When I heard of Gary no longer teaching CSE12, the way it should be taught, I was shocked. Immediately, I figured it was probably due to the difficulty level. If that was the deciding factor, then I ask, aren't we here in this University to be challenged?

about 4 months ago ·

Mark as Irrelevant

· Report · Delete Post

Nobuhiro Makida

Looking at this facebook CSE12 site, I'm blown away to see how much CSE12 has evolved after taking the class in year of 2001. How wonderful to see all of these messages from current and former students and tutors. I was one of the head tutors for CSE12 and had a privilege to work with Gary for CSE12 for one year (4 quarters).

CSE12 is the gateway to success. This is where you discover yourself in the world of 0s and 1s and the beauty of becoming the conductor to make the magical music happen. This is where you learn how to speak to the computers. This is where you understand the concept of computers. This is where you learn how to collaborate with your classmates. This is where you learn how to plan. This is where you think, think, and think about programming. Though the world of computer science may seem huge, this is the first and very important step you'll ever make in your computer science life.

And of course, from what you can see here on this facebook, CSE12 is not only about computer science. Believe me or not, you'll find friends of your life. I mean this, folks, 8 years after graduating UCSD and being back here in Japan for 3 years, I am still connected to many of CSE12 class mates, tutors, and of course Gary Gillespie. Thanks to those who have sent me the messages after devastating earthquake.

I don't have enough space here to describe Gary Gillespie. He was my lecturer, mentor, and a long time friend. My valuable time with CSE12 and Gary has lead me where I am today. I can't think of a better person who could teach CSE12 other than Gary.

Thanks Gary for putting this together, and hope to catch up with you soon in person.

Cheers!
-Nobu Makida (class of 2003)

about 4 months ago ·

Mark as Irrelevant

· Report · Delete Post

Jason Zhao

A few times in life you meet an incredible challenge and you have a spurt of growth. Cse12 was one of those.

about 2 months ago ·

Mark as Irrelevant

· Report · Delete Post

Reply

[Ryan Kassel](#) commented on your [status](#).

Ryan wrote: "Man, I have to say, looking back, you and your CSE12 class totally DEFINED my comp sci experience and set the bar for what a teacher of a tough subject should be. Committed, fair, passionate, coherent, and caring. Good luck to those eager beavers. Even though I didn't earn one in your class, you get an A+ in my book. KEEP TEACHING"