

March 14, 2014 | By Doug Ramsey

Recent Computer Science Alumna Makes Waves – Not Photo Filters – at Instagram

It isn't often that a computer scientist is written up in an international fashion magazine, but an alumna of the Computer Science and Engineering (CSE) department at the University of California, San Diego is taking the publicity in stride.

Brina Lee (BS Communications '08, MS Computer Science '13) was the first full-time female engineer hired at Instagram. She joined a year ago, and she found herself playing in a much bigger pond following Facebook's acquisition of Instagram in late 2012. In the latest edition of the magazine *ELLE*, Lee is quoted as saying, "It's great now that Instagram is a part of Facebook, so we can leverage all the women here!"



Brina Lee. Image by ELLE Magazine

After an undergraduate degree in communications, Lee worked in marketing, eventually climbing from small businesses to Yahoo! She taught herself HTML, and in 2010 began enrolling in classes through UC San Diego Extension. "I decided to enroll in part-time classes to build a foundation in computer science by learning Java," Lee wrote in an Op-Ed article for the Huffington Post in October 2013. "I was surprised I was pretty good at it, but more importantly – I liked it."

CSE lecturer Rick Ord remembers Lee as a "pesky Extension student trying to get me to sign her Concurrent Enrollment through Extension add card for a CSE 11 that was full with a wait list." Lee needed the course on her resume, because she had decided to apply to CSE for graduate school. She passed muster, successfully completing the core undergrad coursework in computer science while tutoring several undergrad classes as a volunteer, and she was accepted into the Master's program.

Lee eventually earned her Master's degree in 2013, after TA'ing several undergraduate classes and doing her main project with CSE professor Ryan Kastner. She built a "slouch detector" called Droop, a wearable device to help identify bad posture. "It was 100% Brina's idea, and it spanned several CS topics, including embedded systems, human-computer interaction, and mobile computing," said Kastner. "It also showed how computing can make an impact in everyday life."

While working on her MS degree, Lee did internships at Google and Facebook before getting her full-time engineering position at Instagram last April. She credits her degree and a Grace Hopper Scholarship Award for reinforcing her resume when applying for software engineering jobs. Lee regularly also attends the annual Grace Hopper Celebration of Women in Computing, and she openly bemoans the fact that women make up only 13 percent of all computer science graduates – a statement that is more powerful because it comes from a software engineer who did *not* get an undergraduate degree in computer science (because, she confesses, of one “boring” class on coding in high school). Lee hopes more women will become engineers and computer scientists, and she expects it will become easier for women to get ahead in the tech world as more of them climb the corporate ladder. In her Q&A in *ELLE* magazine, Lee pointed to Jocelyn Golfein: “She’s one of the highest engineering directors here at Facebook, and because Sheryl’s at the top, I think all the male engineers here do look at women differently.”

Meanwhile, faculty in the CSE department point out that in addition to enrolling more high school students in computer science, the department must find more ways to make it possible for late converts to change their majors and get into necessary courses if they need to catch up – especially when the department is dealing with an impacted major. Brina Lee is one reason “why I am a strong advocate to keep spots open in our impacted major for those who do not come in as a declared CSE major and find religion (computer science) later on,” noted Ord. “They more often than not become some of our best majors.”

“It’s never too early or too late to switch majors or careers,” wrote Lee in the Huffington Post, “especially if it’s what you’re meant to do.”

Oh, and if you’re wondering which Instagram filter for photos is the CSE alumna’s favorite, she says... none. But she does have a favorite video filter; it’s called Vesper.

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