UC San Diego News Center

By Doug Ramsey

Mar 06, 2014

Online Course Developed in Computer Science and Engineering Ranks No. 1



After all the work they put into the online course they inaugurated in the fall, Pavel Pevzner, a professor of computer science and engineering, and instructors Phillip Compeau and Nikolay Vyahhi have concrete evidence that it was a success even beyond the impressive number of people who signed up for the course – more than 30,000 in all.

According to CourseTalk, which tracks user reviews and ratings for Massive Open Online Courses (MOOCs) on a worldwide basis, the UC San Diego-based course on Bioinformatics Algorithms (Part I) currently ranks No. 1 among all online courses with ratings. The rankings are based on the course's five-star ranking, and 13 superlative reviews that averaged 4.9 out of 5 points. The course just completed, and students may submit more reviews, so it's difficult to know how long the UC San Diego course will remain No. 1.

The No. 2-ranked MOOC is an introduction to interactive programming in Python, which, unlike Bioinformatics Algorithms, has much broader appeal because it's a course for beginners. By contrast, students who took Pevzner's course had to already know how to program in at least one language. Indeed, students gave the UC San Diego course great reviews despite the fact that it was a difficult class, whereas positive student evaluations typically correlate to the ease and fewer hours spent studying. According to Pevzner, the reviewers were asked how many hours per week they worked on the course, and the mean answer was 12 hours and 45 minutes – "way more than we expect from students taking regular UC San Diego classes!"

The reviews on Coursera reflect the appreciation of students who were given access to a variety of new tools developed in connection with the course lecture videos.

"Bioinformatics Algorithms includes multiple amazing resources to enhance your class experience," wrote one anonymous reviewer. Specifically, students were given access to Rosalind, a programming resource offering an introduction to Python as well as complex bioinformatics problems, as well as an online textbook. "This is one of

Related links

- Read More About Bioinformatics
 Algorithms Course at UC San Diego
- View Current CourseTalk Rankings
- Learn More About Bioinformatics
 Algorithms (Part 1) on Coursera
- Read the Stepic Online Textbook

the best courses that I've ever taken," said reviewer Eun Cheon Lim, a bioinformatics Ph.D. student at Max Planck Institute, who completed the course.

Added another reviewer, Guillermo Garcia, who also completed the course: "Very well organized, very good material and CHALLENGING! I felt very satisfied when finishing the assignments." Looking to the future, Pevzner says the course will run again in Fall 2014, and will be followed by Bioinformatics Algorithms (Part 2), which is currently under development.

Although UC San Diego has been using technology in the classroom for many years, the campus is now part of a UC-wide initiative to help formulate a way forward for our online education efforts.

"The online phenomenon, including MOOCs, has captured the imagination and creativity of faculty and students who love technology, and the ways it can provide access to ideas," said Barbara Sawrey, associate vice chancellor for academic affairs and dean of undergraduate education, who is part of a group exploring how technology can improve education at UC San Diego. She added that the campus is looking into a variety of ways to deliver courses—from MOOCs to partially online (blended/hybrid) instruction—to enhance student and faculty engagement with, for example, distance learning and new technologies in the classroom.

Keep up with campus news by subscribing to This Week @ UC San Diego