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Plenary Panel Session at CSEE&T 2016

Why You Should Be Teaching Deployment in Your Curriculum!

Moderator:

Len Bass, Professional Education Consortium

Panelists:

Bram Adams, MCIS, Polytechnique Montreal Christopher Parnin, North Carolina State University Lorin Hochstein, Netflix

Abstract

Continuous deployment quickly has become an established practice in large software companies. Its goal is to bring smaller features to the end user faster, without sacrificing quality. It relies on a combination of choosing the right software architecture, deployment process and tool chain. While large companies have developed their current continuous deployment methodology largely from scratch, training employees on the fly, they need experienced, knowledgeable deployment engineers to keep up the process. Similarly, small and medium sized enterprises and startups want developers trained in continuous deployment principles to quickly make strides. However, standard university and college curricula only cover individual elements of a typical continuous deployment pipeline, if at all. This panel will discuss the current state of teaching continuous deployment, an ideal curriculum as well as current endeavors towards such a curriculum.

About the panelists

Len Bass is a well-known figure in the software architecture world through his writings and his lectures. He performed most of this work during his 25 years at the Software Engineering Institute of Carnegie Mellon University. He has given over 30 keynotes including one for CSEET in 2009. He developed his current passion for DevOps during a three-year stint at National ICT, Australia from 2011 to 2015.

Bram Adams is an assistant professor at Polytechnique Montréal (Canada), where he heads the MCIS lab on Maintenance, Construction and Intelligence of Software. His research interests include all aspects of software release engineering, mining software repositories and software maintenance. He is one of the organizers of the RELENG workshop, as well as one of the editors of the 1st IEEE Software Special Issue on Release Engineering.

Christopher Parnin is an assistant professor at North Carolina State University. Previously, he has had a decade of industry experience as a software developer. He has developed a new graduate course that teaches skills and practices related to DevOps and continuous deployment. So far, 100 students have taken the course. In the course, students learn to build a continuous deployment pipeline and receive hands-on training on tools and practices needed.

Lorin Hochstein is a Sr. Software Engineer on the Traffic & Chaos Team at Netflix, where he works on ensuring that Netflix remains available. He was previously Sr. Software Engineer at SendGrid Labs, Lead Architect for Cloud Services at Nimbis Services, Computer Scientist at the University of Southern California's Information Sciences Institute, and Assistant Professor in the Department of Computer Science and Engineering at the University of Nebraska–Lincoln.