Kevin Lubick

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Work Experience

Software Engineer Intern – Google 6/2015-8/2015
Created a visualization framework for a portion of Google's cloud services to aid in the managing and configuration of virtual machines.

Graduate Research Assistant – NCSU 9/2013-5/2015
Worked to design and test a social screencasting system, specifically the implications of intra-co-worker knowledge sharing.

Undergraduate Research Assistant – Carthage College 6/2012-12/2012
Developed Storyteller, a granular version control system. Project used Java and databases extensively. Presented this work at SPLASHcon 2012.

Math/Computer Science Fellow – Carthage College 9/2011-5/2013
Tutored students in introductory math and computer science courses.

Java Intern – TDS Telecom 5/2011-9/2011
Was involved in many different aspects of creating a new customer interface that allowed customers to modify their telephone, data and satellite plans via the internet.

iPhone Application Developer – Innocorp LTD 6/2010-9/2010
Developed a proprietary app to test for the amount of impairment in a person's mental faculties based on the amount of alcohol consumed.

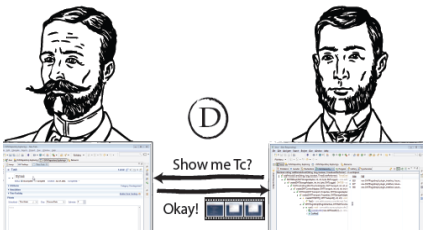
Technical Skills

Languages
Java, C++, LabView, HTML/CSS, JavaScript

IDEs/Tools
Eclipse, Windows, Linux, AngularJS, jQuery, D3.js, three.js Apache Ant, Maven

Selected Projects

FindBugs and fb-contrib-quickfixes
FindBugs is an open source Java static analysis tool used to pre-emptively find questionable code and recommend solutions. I contribute new detection patterns, improved notification messages and quickfixes. I created an Eclipse plugin that automatically fixes many of these patterns and uses a full dev-ops build pipeline using Travis-CI. Any time code is committed, the plugin is automatically built, tested and deployed. http://goo.gl/bOsm6H



Social Screencasting
This project aims to automatically generate video screencasts from normal computer-based workflows. The thought is that if information workers have access to their coworker's screencasts, they will learn to use new tools, becoming more productive. The system recommends screencasts and tools, further improving productivity. http://goo.gl/2SGJJC

Storyteller
Modern version control systems (VCS) keep coarse-grain snapshots as the history of a project. Looking at these snapshots, it can be hard infer design decisions or otherwise learn how expert developers work. Storyteller is a fine-grain VCS that makes video-like playbacks from data collected via an Eclipse Plugin. These playbacks can be annotated to preserve transient design decisions. http://goo.gl/Stvek9

Zero-g Fuel Gauge
Measuring how much fluid is in a tank while in space is hard, because the fluid sloshes around and there is no "up" or "down". When I was an undergrad, I worked as a part of the Carthage Microgravity team to solve this problem for NASA. One of the challenges I faced was designing a user interface that could be used to easily collect data in zero-g. http://goo.gl/RVfPBK

Education

B.A. (2010-2013): *Carthage College*, Kenosha, WI 3.93/4.00 GPA
Majored in Computer Science with minors in Physics, Math and Spanish.

Publications

Fuse: A Reproducible, Extendable, Internet-scale Corpus of Spreadsheets Titus Barik, Kevin Lubick, Justin Smith, John Slankas, Emerson Murphy-Hill, MSR 2015

Can Social Screencasting Help Developers Learn New Tools? Kevin Lubick, Titus Barik, Emerson Murphy-Hill, CHASE 2015

Commit Bubbles Titus Barik, Kevin Lubick, Emerson Murphy-Hill, ICSE, New Ideas and Emerging Results Track, 2015

How Developers Visualize Compiler Messages: A Foundational Approach to Notification Construction Titus Barik, Kevin Lubick, Samuel Christie, Emerson Murphy-Hill. 2nd IEEE Working Conference on Software Visualization, 2014

Reduced Gravity De-gassing of Perfluorohexane Coolant Using a Radial Membrane Contactor (Poster) Danielle Weiland, Eli Favela, Amelia Gear, Kevin Lubick, Steven Mathe, John Robinson, Seth Schofield, Kevin Crosby, Nancy Hall, ASGSR, 2013

Modal Evaluation of Fluid Volume in Spacecraft Propellant Tanks (Presentation) Steven Mathe, KelliAnn Anderson, Amber Bakkum, Kevin Lubick, John Robinson, Danielle Weiland, Rudy Werlink, Kevin M. Crosby, Proceedings of the Wisconsin Space Grant, 2012