# Ryan Carlson

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### Education

#### Carnegie Mellon University, Pittsburgh, PA (2011 - present)

PhD student at the Language Technologies Institute and the Program for Interdisciplinary Education Research (PIER). GPA: 3.85.

#### Swarthmore College, Swarthmore, PA (2007 - 2011)

Graduated with Honors. Major in Computer Science, Minor in Cognitive Science. Total GPA: 3.69, Major GPA: 3.92.

### **Publications**

- R. Carlson, K. Genin, M. Rau, and R. Scheines. Student Profiling from Tutoring System Log Data: When do Multiple Graphical Representations Matter? In Proc. Educational Data Mining, July 2013.
- I. Goldin and R. Carlson. Learner Differences and Hint Content. In Proc. Artificial Intelligence in Education, July 2013.
- R. Carlson, V. Keiser, N. Matsuda, K. R. Koedinger, C. P. Rosé. Building a Conversational SimStudent. In Proc. Intelligent Tutoring Systems, pages 563-569, June 2012 (Short Paper).
- A. Ogan, S. Finkelstein, E. Walker, R. Carlson, and J. Cassell. Rudeness and Rapport: Insults and Learning Gains in Peer Tutoring. In Proc. Intelligent Tutoring Systems, pages 11-21, June 2012.
- A. Stromme, R. Carlson, and T. Newhall. Chestnut: A GPU Programming Language for Non-Experts. In Proc. ACM Workshop on Programming Models and Applications for Multicores and Manycores, pages 156-167, Feb 2012.
- **R. Carlson** and A. Danner. Bridge detection in grid terrains and improved drainage enforcement. In Proc. ACM Symposium on Advances in Geographic Information Systems, pages 250–260, Nov 2010.

## Awards

- Full scholarship for Pittsburgh Science of Learning Center Summer School, July 2011.
- NSF Travel Grant for ACM SIGSPATIAL GIS Conference, November 2010.
- Sigma Xi member, Fall 2009 present

# Work Experience

Software Engineering Intern, Google Maps, Android, Google, Mountain View, CA (May. 2013 - present)

- Created framework to enhance benchmark reliability by making tests network-independent.
- Added "More Info" section to Places page to offer user additional information.

Software Engineer, Safaba Translation Solutions, Pittsburgh, PA (Nov. 2011 – present)

- Built machine translation systems customized to client demands.
- Analyzed translation quality and generated fixes to improve our engines.

- Developed SSL-encrypted translation server used by our clients.

Lead Mobile Developer, Ludo Mechanica, Pittsburgh, PA (Aug. 2012 – present)

- Developed DropKicker, an Android app to help users change their habits (currently in limited beta release).
- Worked with a small team to design the app specifications and visual direction.

Web Administrator, Swarthmore College Admissions, Swarthmore, PA (2009 - 2011)

- Created and maintained Admissions pages (i.e. blogs, college fairs, web ambassadors).
- Set up and monitored Facebook page for admitted students.

Teaching Assistant, Swarthmore College Computer Science Department, Swarthmore, PA (2009 - 2011)

- Ran weekly student sessions to help with homework.
- Provided assistance in class and lab.
- Introduced and supervised labs in professor's absence.

### Skills

Computer Languages: Python, Java, C, C++, Objective-C, Lisp (CL/Scheme), PostegreSQL, Bash, HTML, CSS.

Mobile Development: Android, iOS.

Operating Systems: Linux, Mac OS X, Windows.