

ALEX LEIGHTON

Eugene, OR
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EXPERIENCE

On Time Systems Inc.

2010 - present

Software Engineer

imagreendriver.com (<http://imagreendriver.com/>) | Eugene, OR

- **Mobile Development** [*Objective C, iOS, Java, Android, JNI, C*]
 - Led the development of the Green Driver Android client.
 - Led the development of the RLN Android client.
 - Maintained existing Green Driver iOS client.
 - **Monitoring & Reporting** [*C++, Javascript, Postgresql*]
 - Sole developer of a monitoring, reporting, and notification framework used in all of the backend servers.
 - Made a web-based dashboard for real time viewing of monitored data.
 - Notification that sends emails and text messages on alert status.
 - **Backend Development** [*C++, Python, C*]
 - Developed a query parser for the internal geocoder, achieving an improvement in the runtime by a factor of 10 over the existing parser.
 - Created an efficient binary protocol for exchanging atlas data between tile server and clients. Reduced message size by a factor of 4.
 - Maintained Green Driver backend servers in Python and C++.
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EDUCATION

Master of Science, Computer and Information Science

2009 - 2011

University of Oregon, Eugene OR

Bachelor of Arts, Computer Science

2005 - 2009

Willamette University, Salem OR

Minors in Math, Philosophy

Graduated *cum laude*

SKILLS

Languages

Experienced

Java, Python, OCaml

Competent

C++, C, Haskell, Javascript, Objective C, PHP

Technologies

- Android SDK / NDK
 - iOS SDK
 - Java Native Interface
 - pthreads, sockets, poll/epoll
 - Twisted event framework
 - SQLAlchemy
 - jQuery
 - HTML / CSS
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PUBLICATIONS

Green Driver: AI in a Microcosm

Coauthor, presented at the AAAI Conference, August 2011 [aaai.org
(<http://www.aaai.org/ocs/index.php/AAAI/AAAI11/paper/view/3648>)]

ADDITIONAL ACTIVITIES

- Contributing to Kivy (<http://kivy.org/>), an open source Python library for graphics applications that make use of new user interfaces, like multi-touch.
- Participated in the 2007 ACM Programming Contest.
- Volunteered at North Salem High School helping students learn computer science and math.