

# Alexander H. Kesling

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*References available upon request*

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## Education

- North Carolina State University (Graduation in 2013)  
*Double Major in Computer Science & Applied Math*

### Completed (Cumulative GPA 3.831)

Programming I & II: Java	C & Software Tools
Computer Architecture and Assembly ( <i>x86 Assembler</i> )	Discrete Math
Data Structures	Linear Algebra
Operating Systems	Computational Music Composition
Automata, Grammars, and Computability	Combinatorics
Software Engineering	Probability

## Work Experience

- Sidewalk Media Inc., Durham NC
  - Lead Developer / CTO (Fall 2010 - Present)
    - \* Worked on a mobile couponing platform in a similar space to Groupon Now and LivingSocial Instant.
    - \* Worked closely with a third party contractor in the development of an **HTML5** based **Sencha Touch** mobile web application.
    - \* Developed a simple **RESTful API** for communication between a server-side **Django** application and an **iPhone** client. Backend was supported by **SQLite** during development and **MySQL** in production.
- Red Hat Inc., Raleigh NC
  - Software Engineering Intern (Summer 2010)
    - \* Contributed to the open source **Cobbler** provisioning server project (<https://fedorahosted.org/cobbler/>). Cobbler is written in **Python** with an **XMLRPC** API layer catering to both command line and web based (**Django**) front ends.
  - Software Engineering Intern (Summer 2009)
    - \* Headed the development of a **Django** and **JQuery** based Internal Timesheet application. I was greatly helped in my endeavors by an intern on the QA team.
    - \* Worked on **Agilefant** (<http://www.agilefant.org>), a web-based *open source* Agile Software Project Management Suite. **Agilefant** is written in **Java** using **Spring**, **Webwork**, and **Hibernate**.
    - \* Managed Red Hat Summer Intern Video Production
- Shodor Education Foundation, Durham NC
  - System Administration Internship (Jun 2006 – Aug 2008)
    - \* Made **Fedora 9** run on a **LittleFe** (6 node, one hard drive, tiny beowulf cluster)
    - \* Worked with a fellow intern to set up a full **Nagios** installation for Shodor's infrastructure
    - \* Set up a working **Jabber** server (**OpenFire**) and configured it to authenticate with **LDAP**
    - \* Wrote administrative tools in **PHP**
    - \* Administered **Linux** (**SuSe**, **Fedora**) and **Mac OS X** workstations as well as various server infrastructure (**SuSe**, **CentOS**)
    - \* Managed virtualized servers using **Xen** and associated tools
    - \* Developed in-house **RPMs** and maintained a basic **YUM repository**
  - SUCCEED Apprenticeship (Apr 2006 – Jun 2007)
    - \* Worked with six fellow Apprentices to build a website for The North Carolina School of Science and Math using **PHP** with a **MySQL** back-end database

## Technical Skills / Experience

- Clubs/Extracurricular Activities
  - Aerial Robotics Club
    - \* Attended 2009, 2010 & 2011 AUVSI Student UAS Competitions in Maryland
    - \* The team brought home 1<sup>st</sup> place overall in 2010 and 2<sup>nd</sup> place in 2011
    - \* Helped in the development and continued maintenance of an imagery viewer designed for assisting in the finding of targets distributed throughout an open area. This viewer is written in **C++** using the **OpenSceneGraph** framework built on top of **OpenGL**. It pulls imagery information from a **GIS** enabled **PostgreSQL** database.
  - NCSU Linux Users Group
- Intermediate administration of various Linux distributions (I also run Fedora as my primary OS)