# Michael Barnes

### Education

### **B.S.** Computer Science.

Graduated Magna Cum Laude from Virginia Tech.

# Experience

**SWE** Corporate Engineering, Google, New York, NY.

- Intern Wrote build rules for both client and server side code that allowed for individual javascript files to be easily served in development and a single compiled file to be served in production.
  - Created python appengine service for communicating with backend data source on behalf
  - Evaluated UI frameworks and worked with team to choose correct framework to suit our
  - Designed and implemented part of UI using AngularJS, Angular Bootstrap, and TODC Bootstrap.

## **SDET Adexpert Delivery Engine**, *Microsoft*, Bellevue, WA.

- **Intern** Designed specification for Adexpert DE test one box deployment tool.
  - Worked with multiple teams in order to design a tool that would best fit a wide variety of deployment needs.
  - Implemented VM service for DE test one box deployment tool.
  - Collaborated with another member of the DE test team to design and implement the step execution service for the DE test one box deployment tool.
  - Designed and Implemented a web UI using jQuery and ASP.net for the DE test one box deployment tool.

**Software Rational Buildforge**, *IBM*, Austin, TX.

- Dev Co-op O Automated metric gathering and charting from Rational Team Concert and Rational Quality Manager for Rational Buildforge and Rational Automation Framework.
  - Co-Authored Rational Build Forge Agent Update Utility, which deploys and updates Build Forge agents on remote machines.
  - Wrote a tool which analyzes test results and creates defects in Rational Team Concert from recurring failures.
  - Resolved defects for the Build Forge product.
  - Brought Agent update up to the IBM Rational globalization standards.

# Computer skills

Software GNU/Linux, Vim, Git, Subversion, Build Forge, Django, Flask, Hyper-V, KVM.

**Programming** Python, C, Javascript, Java Languages

# Open Source Work

Engagement Worked in a team to create a mobile application for tracking a users engagement Tracker based on readings from an EEG headset. The project page can be found here

facts.cat Implemented a web application using Flask and Bootstrap.js geared toward the dissemination of cat knowledge. Users are allowed to add facts and view random facts on the page. The project page can be found here

### Extracurricular Activities

Undergrad I worked with professor Cal Ribbens and Dr. Bharath Ramesh on the Samhita **Research** distributed memory system.

Undergrad
I was an undergraduate teaching assistant for the computer science department.
Teaching
I assisted in teaching and administering comparitive languages, a course about programming language design.

**Member of** My interest in open-source software spurred me to join the Virginia Tech Linux and Unix user group my sophomore year of college. I am very interested in GNU/Linux and enjoy learning about open-source software.

Officer for I joined the Virginia Tech Parkour club my freshman year of college and was made VTPK an officer my sophomore year. My duties varied from organizing events to running the website.

### Awards and Honors

Deans List Fall 2009, Spring 2010, Fall 2011, Spring 2012, Fall 2012, Spring 2013

VTCSec 1st place team (2013), 3rd place team (2012)

Summit

**BAH Cyber** 1st place team (2013) **Triathalon** 

# Interests

**Music** I have been playing the trumpet for eleven years and enjoy all types of music. I recently began learning the piano.

**Arduino** My friends and I have spent a lot of time with ardupilot/arduocopter. We recently made a quadcopter based on arducopter.