Julius Alexander IV

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education

Rensselaer Polytechnic Institute – Troy, NY — *Antic. Graduation–2016*

- Pursuing a dual degree in Computer & Systems Engineering and Computer Science with a 3.83 GPA
- Completed courses in Data Structures, Signals & Systems, Embedded Control, Algorithms, Computer Architecture, Operating Systems, Quantum Physics, Programming Languages, Analog Electronics

experience

Google – Kirkland, WA — *May 2014–August 2014*

- Developed a Python application for fuzz testing MySQL that spawns MySQL processes, executes randomly generated commands on them, watches for crashes, and collects data about those crashes
- Learned multiple internal Google technologies such as source control and build tools

State Farm Insurance – Bloomington, IL — *May 2013–August 2013*

- Using VBA, developed an Excel macro to access databases and pull data to populate a spreadsheet
- Formulated requirements and designed a prototype for a future tool to manage any and all information relating to test IDs
- Developed and designed two intern websites for internal use, built with HTML, CSS, and Javascript

Google Android Camp – Mountain View, CA — *June 2013*

- In a team of five, closely collaborated to brainstorm, design, and develop a working Android application using Java and incorporating picture-taking, the Google Maps API, and location services
- Received training from Android Team employees on how to properly develop Android apps

projects & skills

- *Identitie* – Winning Hack Upstate Fall 2013 project that brings two-factor authentication client-side using a Chrome extension, iPhone app, and Node.js server
- *Visual Logic Circuits* – An input/output system written in Java to render and display visual logic circuits for a psychology research project
- *VGA Output* – Draws pictures on a VGA monitor using a C8051 microcontroller
- *Avoclock'o* – Start-to-finish design process of a persistent personal alarm system utilizing an Android app, pressure sensor, light and sound stimuli, and an Arduino
- *sprawl* – "Distributes" the internet by utilizing the bit torrent protocol in-browser with a Chrome extension and Go key-value server
- One year experience with Python, one and a half with C++ and Java, comfortable with Linux/Unix-like systems, one year experience with HTML, CSS, and Javascript, working knowledge of Haskell

activities

- *ΛΧΑ*, Webmaster, Standards Chair on Executive Committee — *2013–Present*
- *Rensselaer TALKS*, Committee Member and Committee Chair — *2013–Present*
- *ΥΠΕ*, Computer Science Honor Society — *2015–Present*
- *HKN*, Electrical & Computer Engineering Honor Society — *2013–Present*
- *Racquetball Club* — *2012–Present*
- *Computer Science I Programming Mentor* — *2014–2015*