

JULIUS ALEXANDER IV

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education

Rensselaer Polytechnic Institute – Troy, NY

Antic. Graduation–2016

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

experience

Google, Chrome – Los Angeles, CA

May 2015–August 2015

- Rebuilt Chrome's spellchecking system to use multiple languages simultaneously, fulfilling one of its oldest feature requests estimated to impact millions of users
- Facilitated and implemented a UI review for the Chrome settings page and right-click menu

Google, Cloud Security – Kirkland, WA

May 2014–August 2014

- Developed a Python fuzzer to break MySQL instances and aggregate information relevant to the cause of the crashes
- Learned multiple internal technologies such as source control, build tools, and testing frameworks

State Farm Insurance – Bloomington, IL

May 2013–August 2013

- Wrote an Excel macro to gather and consolidate information from several databases
- Formulated requirements and built a prototype for a future tool to centralize team-relevant data

projects & skills

- *Identitie* – Client-side two-factor auth using a Chrome extension, iPhone app, and Node.js server
- *Visual Logic Circuits* – Input/output system that renders and displays "visual logic circuits"
- *VGA Output* – VGA protocol implementation that draws shapes and patterns on a 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
- *Geosnap* – Android Camp 2013 app using the Google Maps API, camera, and location services
- *Cranium.css* – Machine learning CSS framework written in Go and Python
- Three years experience with Python and C++, two with Java, one and a half year experience with HTML, CSS, and Javascript, proficient with Linux/Unix-like systems, Git, Android development, Haskell, Go, Scala, and Elm

activities

- AXA, Webmaster, Executive Committee Standards Chair *2013–Present*
- Rensselaer TALKS, Committee Chair and Founding Member *2013–Present*
- YIIE, Computer Science Honor Society *2015–Present*
- HKN, Electrical & Computer Engineering Honor Society *2013–Present*
- TBII, General Engineering Honor Society *2013–Present*
- Racquetball Club *2012–Present*
- Computer Science I Programming Mentor *2014–2015*