

# JULIUS ALEXANDER IV

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## education

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*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

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*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 application 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

*Google Android Camp – Mountain View, CA*

*June 2013*

- ▶ Collaborated with a small team to brainstorm, design, and develop a working Android application incorporating picture-taking, the Google Maps API, and location services

## projects & skills

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- ▶ *Identitie* – Client-side two-factor authentication using a Chrome extension, iPhone app, and Node.js server
- ▶ *Visual Logic Circuits* – Input/output system that renders and displays visual logic circuits for a psychology research project
- ▶ *VGA Output* – Recreated the VGA protocol to draw 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
- ▶ Two years experience with Python and C++, one and a half with Java, comfortable with Linux/Unix-like systems and Git, one year experience with HTML, CSS, and Javascript, working knowledge of Haskell

## activities

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- ▶ AXA, Webmaster, Standards Chair on Executive Committee *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*
- ▶ Racquetball Club *2012–Present*
- ▶ Computer Science I Programming Mentor *2014–2015*