

# Dwight Naylor

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538 Thompson Ave, Mountain View, CA 94043 (US Citizen)

## Employment

- Google** (2016-Present)  
**Staff Software Engineer (2020-Present)**  
**Ads Engineering Productivity** Mountain View, CA
- Pioneered novel latency testing framework supporting dozens of buy side platform ads teams
  - Responsible for tooling and testing behind a 100 billion dollar / year business
  - Designed and implemented several systems for tracking and increasing test coverage
- Developer Tools** Kirkland, WA **Software Engineer, Research Lead (2018-2020)**
- R&D Lead for experimental code visualizations in Google's internal development suite
  - Responsible for tools and integrations supporting 100k Google engineers
  - Designed and implemented deep static analysis for several code understanding features
  - Full-stack responsibility, from frontend (Typescript, Angular, RxJS) to backend (Java, Golang)
- DisplayAds Infrastructure** Mountain View, CA **Software Engineer (2016-2018)**
- Responsible for several redesigns of Google's internal ads pipelines
  - Designed and implemented a combination of two major internal binaries
  - Analyzed and reported success of various experiments and changes to the stack
  - Backend engineer, working in C++
- Intentional Software Corporation** Bellevue, WA **Software Development Intern (Summer 2015)**
- Designed and implemented proprietary software on the development team
  - Contributed to ideas in the company architecture, added several widely-used development features
  - Worked with Visual Studio and C#
- NASA Ames Research Center** Moffett Field, CA **Software Development Intern (Summers 2011 - 2014)**
- Joined NASA Intelligent Systems division in high school from Geometry Proof Writer project
  - Worked extensively with automated proving, including inventing and programming a proof-recognition system
  - Designed and implemented multiple domain-specific analysis languages with Eclipse XText
  - Worked with the Eclipse framework to expand functionality of AdvOCATE, an assurance case editor

## Education

- Rensselaer Polytechnic Institute** Troy, NY **Honors Graduate (Class of 2016)**
- BS Computer Science, GPA: 3.5

## Personal Projects

- The Mother Of All Programs (MOAP)** (2015)
- <https://tinyurl.com/moap-slides>
  - Creates computer algorithms to solve a given problem specification
  - "Enrolled" the program in RPI's Spring 2016 Computer Algorithms course
- Automated Geometry Proof Writer** (2009-2011)
- Automatically generates proofs from a formal description of a geometry problem
  - Highly successful science-fair project. Write-up available at <https://www.tinyurl.com/geometry-prover>
- AI and NLP research projects** (2011-2017)
- Game-playing AIs, natural language advice robots and various neural net learning programs
  - Experience in NLP, machine learning, computer vision, statistical analysis

## Publications

- Querying Safety Cases** (SafeComp 2014)
- Describes several querying languages I designed and implemented with NASA Ames' formal methods team. The AQL language has since been updated extensively and complemented with several related languages. Available at [www.tinyurl.com/query-paper](http://www.tinyurl.com/query-paper)

## **Skills**

### **Programming languages (in rough order of proficiency)**

- Java, SQL, Typescript, C++, C#, Prolog, Python, HTML, css, Golang, XTend, C, Lua, Scala, Javascript

### **Developed with**

- Eclipse (SDK and RCP), Visual Studio (C#), SVN, Github

### **Libraries**

- Angular, RxJS, Graphiti, Xtext, OpenCV, OpenGL

## **Awards**

Rensselaer Leadership Award

**(2012-2016)**

Dean's list at RPI every semester

**(2012-2016)**

Intel Excellence in Computer Science, AIAA Intelligent Systems, US Army certificate of Achievement, and STEM certificate of excellence awards

**(2011)**