

NATHAN M. SWAN

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Campus 1500 St. Olaf Avenue, Northfield, Minnesota 55057

Home 5015 E. 98th Avenue, Anchorage, Alaska 99507

EDUCATION

St. Olaf College

Northfield, Minnesota

Expected Graduation: May 2019

Total GPA: 3.66

Major GPA: 3.87

Relevant Coursework

Software Design, Algorithms and Data Structures, Mobile Computing Applications, Operating Systems, Hardware Design, Artificial Intelligence, Combinatorics, Abstract Algebra I, Elementary Linear Algebra

SKILLS

Programming Languages

- Extensive experience: C/C++, Java, JavaScript, D, Dart
- Moderate experience: Python, Ruby, PHP, Objective-C, Assembly, Perl, Prolog

Development Tools

- Desktop: Java Swing, Cocoa, Qt, GtkD
- Front-end Web: HTML, CSS, jQuery, Bootstrap, Angular
- Back-end Web: Rails, Django, CakePHP, vibe.d
- Databases: SQL (SQLite, PostgreSQL), MongoDB
- Utilities: Git, Unix/Shell (Linux, macOS), Make, Vim

EMPLOYMENT

Google – Software Engineering Intern

Mountain View, California, Summer 2018

- Part of the AdWords Overview team, managing the front page for advertisers
- Contributed to a large AngularDart frontend codebase
- Worked closely with full-time engineers, and received PM and UX feedback
- Improved confusing and unwieldy aspects of the interface
- Ran changes behind experiments to measure their effects

CURI Summer Research – Software Developer

St. Olaf College, Northfield, Minnesota, Summer 2017

- Worked on faculty-led research team creating an elementary math curriculum
- Developed Web apps and games to supplement the curriculum
- Created a simple JavaScript animation and physics engine
- Gave and received feedback with peers on a cross-disciplinary team

Technology Consulting Assistant – IT Helpdesk

St. Olaf College, Northfield, Minnesota, School Year 2015 – current

- Assist students, faculty, and staff by phone or in person
- Instruct clients on how to use common software
- Install and troubleshoot various programs
- Enter tickets into Web Help Desk

PROJECTS

- **antimander**: partitions U.S. states into districts using Census data; C++
- **Tasker**: prioritizes tasks based on importance and urgency; Java
- **wms**: simulates an invented discrete-time particle physics; JavaScript, D
- **AutoCast**: reads aloud dramatic scripts using different TTS voices; Objective-C
- **embd**: library for embedding D code into text, particularly HTML; D
- **muninn**: editor for diagrams which represent the stack and heap; C++