# **Nathan Louie**

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## **Education**

#### UNIVERSITY OF MICHIGAN, ANN ARBOR | SCHOOL OF ENGINEERING | APRIL 2018

- · B.S.E. Computer Science Engineering
- · GPA: 3.62/4.00
- · Honors/Awards: Michigan CoE Scholarship of Honor, Dean's List
- · Courses: EECS 381 Object-Oriented and Advanced Programming, EECS 485 Web Databases, EECS 388 Computer Security

# **Work Experience**

#### SOFTWARE ENGINEERING INTERN | BWI GROUP | MAY 2016 - AUG 2016

- · Developed VB solution for parsing customer requirement PDFs into database, reducing processing time by 60%
- Designed and implemented suite of algorithms to distinguish and consistently format sections of requirements from a variety of requirement document types
- · Created prototype interface to update requirements utilizing the database's .NET API and the Word Object Model

## TEST ENGINEERING INTERN | A123 SYSTEMS | MAY 2015 - AUG 2015

- · Developed Windows Form Application to log and email test equipment failure alerts to managers
- · Upgraded hardware and software of lab controller PCs and documented the process

## **Projects**

## WEB PHOTO ALBUM (FLASK, AJAX, SQL, HTML)

- · Developed photo sharing web application with Flask web server
- · Created API endpoints using Flask Routes backed by SQL database
- · Implemented dynamic browsing of photos and albums with AJAX calls to the API endpoints

#### MEDIA LIBRARY MANAGER (C++)

- $\cdot$  Developed C++ library management system with heavy emphasis on coding standards and maintainability
- · Implemented String and Ordered Container data structures with copy and move construction and assignment

#### CAREER QUEUE (FLASK, SQL)

- · Developed application to create a virtual queue for company recruiters at career fairs
- · Implemented back end Flask server to manage queue and submit candidate information
- · Designed and implemented SQL Schema to manage candidate and recruiter metrics
- · Leveraged Twilio API to send reminders based on estimated calculated wait time

#### PERSONAL BLOG (RUBY ON RAILS, HTML, CSS)

· Developed and deployed Ruby on Rails blog on Heroku with multiple connected models and templated view

## **Activities**

## VICE PRESIDENT | THETA TAU - PROFESSIONAL ENGINEERING FRATERNITY | APR 2016 - DEC 2016

- · Audited and appointed members from 70+ member fraternity to committee leadership positions
- · Lead committees in organizing events frequently in the semester and addressed committee concerns
- · Served on the executive board that made important policy and strategy decisions for the fraternity

### Skills

- · Languages: C++, C, Python, JavaScript/jQuery, VB, SQL
- · Frameworks: Flask, Ruby on Rails
- · Development: UNIX/Linux, git/GitHub, Heroku