

Nathan Louie

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Education

UNIVERSITY OF MICHIGAN, ANN ARBOR | SCHOOL OF ENGINEERING | MAY 2018

- B.S.E. Computer Science Engineering, Sociology Minor
- GPA: 3.58/4.00
- Courses: Web Databases, Comp Security, Comp Organization, Logic Design, Data Structures and Algorithms

Experience

SOFTWARE ENGINEERING INTERN | BWI GROUP | MAY 2016 – AUG 2016

- Created process for parsing customer requirement PDFs into database to achieve full requirements traceability, reducing process time by 60%
- Designed and implemented comprehensive suite of algorithms to distinguish and consistently format sections of requirements from a variety of document types
- Developed 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 application to email an alert to supervisor of test equipment failure and log it in .csv file
- Upgraded hardware and software of controller PCs and created reference documentation of the process

Projects

WEB CONTENT MANAGEMENT SYSTEM

- Utilized Ruby on Rails and Bootstrap framework to create personal blog

SILLYQL RELATIONAL DATABASE (DATA STRUCTURES AND ALGORITHMS)

- Selected appropriate data structures and designed a range of algorithms to implement a relational database
- Evaluated runtime and storage tradeoffs for storing and accessing data contained in multiple data structures

FPGA STOPLIGHT CONTROLLER (LOGIC DESIGN)

- Designed Finite State Machine of 3-way intersection stoplight that gave priority to different lanes depending on traffic
- Implemented Verilog HDL Code on an FPGA to simulate the stoplight, and outputted results to the 7-segment displays

Activities

VICE PRESIDENT | THETA TAU – PROFESSIONAL ENGINEERING FRATERNITY | JAN 2015 – PRESENT

- Responsible for auditing and appointing members from the fraternity to committee leadership positions
- Lead these committees in organizing events frequently in the semester and be a point of contact for the leaders
- Serve on the executive board that makes important policy and strategy decisions for the fraternity

REPRESENTATIVE | MICHIGAN PROFESSIONAL FRATERNITY COUNCIL | SEP 2015 – APR 2016

- Worked with representatives from a diverse group of professional fraternities to plan Professional Greek Week
- Hosted a series of academic, athletic, and social competitions between the professional fraternities
- Raised more than \$6000 in 2016 for charitable causes

Member | CLUB SWIMMING AT THE UNIVERSITY OF MICHIGAN | SEP 2015 – PRESENT

- Train multiple times a week and represent the University of Michigan at club collegiate swim meets

Skills

- Curriculum: C++, C, Python, SQL
- Work Experience: C#, Visual Basic
- Hobby: JavaScript, Ruby on Rails