

Shyam Thiagarajan

<https://shyamw.github.io> | 865.719.8767 | thiagarajan.12@osu.edu

EDUCATION

THE OHIO STATE UNIVERSITY

BS IN COMPUTER SCIENCE & ENGR.

Expected May 2019 | Columbus, OH

Cum. GPA: 3.86 / 4.0

Conc. in Software Engineering

College of Engineering

HONORS

Dean's List (All Semesters)

Full Tuition Scholarship

National AP Scholar

Winner of 2016 OHI/O Hackathon

EXTRACURRICULAR

Society of Hispanic Professional Engineers

Minority in Engineering Program

Collegiate Web Developer's Club

Open Source Club

SKILLS

SOFTWARE SKILLS

Proficient

Java • C • Python • Ruby

JavaScript • Matlab • SQL

Familiar:

C++ • C# • x86 • Shell

THEORY

Machine Learning

Data Mining

Software Components & Design

Object Oriented Programming

Data Structures & Algorithms

Linear Algebra

Discrete Math

Statistics

Technical Writing

Databases

Networking

DEVELOPER TOOLS

Frameworks

Spring • Rails • Flask

Environments

Eclipse • NetBeans • PyCharm

Vim • Visual Studio • Jenkins

Markup and Data

HTML • XML • JSON

Markdown • RST • YML

Version Control

Git • Subversion

EXPERIENCE

THE OHIO STATE UNIVERSITY | TEACHER'S ASSISTANT

May 2016 – Present | Columbus, OH

- Mentored Engineering Students with programming fundamentals and algorithmic logic
- Guided upper-division students with full-stack web application design
- Lead sessions to write idiomatic code in Java, Javascript, Ruby, and Rails
- Critiqued software design documentation and technology tutorials

CAPITAL ONE | SOFTWARE ENGINEERING INTERN

May 2018 – August 2018 | McLean, VA

- Automated the creation and removal of Netflix Zuul Filters in back-end edges for the mobile app
- Developed a Java SpringBoot Application to update microservice routes and interact with Jira tickets
- Created a custom yml parsing library in Java for SpringBoot profiles
- Initiated a sev3 fix for production with a Python config checker using a Jenkins pipeline
- Presented software and a demonstration to entire Edge Team

TEXAS INSTRUMENTS | SOFTWARE ENGINEERING INTERN

May 2017 – August 2017 | Houston, TX

- Implemented hardware profiling features in the OpenCL runtime using C, C++ to facilitate multi-core development
- Developed a Python user interface and analysis tool for profiling hardware events such as L1 Cache misses and Stall Cycles
- Integrated Program trace and hardware status monitors into the runtime
- Committed changes a quarter ahead of schedule and picked up future workflow
- Presented software and a demonstration to entire Codegen division

OAK RIDGE NATIONAL LAB | LEAD SOFTWARE ENGINEERING INTERN

May 2016 – August 2016 | Oak Ridge, TN

- Lead a team effort to visualize the national electric grid status on a US map for 911, FEMA, The National Guard, The White House
- Utilized Python to scrape utility outage maps and aggregated local outage data in PostgreSQL and MySQL databases
- Trained a Naive-Bayes Machine Learning Filter to extract outage relating tweets with 98% accuracy
- Presented work at the Oak Ridge National Lab Poster Session
- Nominated for and published in journal

OAK RIDGE NATIONAL LAB | SOFTWARE ENGINEERING INTERN

May 2015 – August 2015 | Oak Ridge, TN

- Collaborated on a team effort to model and simulate the Hepatitis-C Cascade of Care
- Utilized Repast Suite and Java to create an agent based model
- Developed health care insurance scenarios and Co-developed patient networking elements
- Presented work at Oak Ridge National Lab Poster Session
- Nominated for and Published in National Conferences on Undergraduate Research Journal