

Shyam Thiagarajan

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EDUCATION

THE OHIO STATE UNIVERSITY

BS IN COMPUTER SCIENCE & ENGR.

Expected May 2019 | Columbus, OH

Cum. GPA: 3.95 / 4.0

Conc. in Software Engineering

College of Engineering

Dean's List (All Semesters)

Full Tuition Scholarship

FARRAGUT HIGH SCHOOL

Graduated May 2015 | Knoxville, TN

Cum. GPA: 4.45 / 4.0

Highest Honors with Distinction

Top 15 out of 445 Students

National AP Scholar

EXTRACURRICULAR

Minority in Engineering Program

Society of Hispanic Professional Engineers

Collegiate Web Developer's Club

Open Source Club

COURSEWORK

UNDERGRADUATE

Software Components

Software Design

Programming in Java

Data Structures and Algorithms

Linear Algebra

Statistics

Technical Writing

SKILLS

SOFTWARE SKILLS

Proficient

Java • Python • Matlab • MySQL

Learning:

C++ • C# • Javascript

DEVELOPER TOOLS

Machine Learning:

Redis • Minor Third

Database Tools:

pgAdmin III • MySQL Workbench

Environments:

Eclipse • Netbeans • Pycharm

Version Control:

Git • Subversion

Markup

HTML • XML • Markdown

EXPERIENCE

THE OHIO STATE UNIVERSITY | TA FOR INTRO TO PROGRAMMING

May 2016 – Present | Columbus, OH

- Mentored Engineering Students with Matlab and algorithmic logic
- Assisted with Engineering labs and Technical Communication Skills

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 to assist 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
- Invited to publish in journal, currently under review

OAK RIDGE NATIONAL LAB | SOFTWARE ENGINEERING INTERN

May 2016 – Aug 2016 | Oak Ridge, TN

- Collaborated on a team effort to visualize the clustering of commercial innovation
- Developed a Geo-coding Python package to convert among geographical descriptions such as coordinates, addresses, CBSA, FIPS, etc.
- Published code into ORNL's internal code repository for future use

OAK RIDGE NATIONAL LAB | SOFTWARE ENGINEERING INTERN

May 2015 – Aug 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

OAK RIDGE NATIONAL LAB | PROGRAMMING INTERN

June 2014 – Aug 2014 | Oak Ridge, TN

- Assisted in modernizing DCAL software for occupational application
- Ensured the modified program's accuracy through Excel
- Presented work to high school teachers, students, and community members

TOP GITHUB PROJECTS

Political Tweet Analysis

- Python application that harvests tweets from Political Candidates
- Graphs analytical data such as frequently used words and frequent tweet times
- Implements a Naive-Bayes text classifier to categorize a phrase as a candidate's

Anagram Hash

- Java MVC Swing GUI that compares scrambled words by hashing characters to prime numbers (fastest algorithm).