Matthew Shan

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Education

University of Notre Dame
Aug 2017- May 2021
B.S. Computer Science
GPA: 3.72
Relevant Courses:

- Fundamentals of Computing (C++)
- Data Structures (C++)
- Systems Programming (Shell/Bash, Python, C)
- Data Science (Python)
- Full Stack Web Dev (Angular, NodeJS, HTML, CSS)
- Algorithms (Coursera: Stanford)
- Programming Paradigms (Java, C++, Javascript)

Coding Experience

Angular	C++
Node	React
Python	Java
HTML	CSS
Swift	Kotlin

Technical Skills

- Unix Shell Scripting
- Full Stack Web Dev
- Unit Testing
- Git Version Control

Professional Experience

Allegion | Carmel, IN — May 2019- August 2019
Software Engineer/ Intrapreneur - Intern (Kotlin, Swift)

- Empowered development of current and future projects by constructing custom Android and iOS libraries designed to seamlessly connect and unlock paired locks through Bluetooth
- Protected and encoded bluetooth communication by implementing elliptical curve encryption techniques to securely sign transmitted byte arrays
- Networked with local entrepreneurial centers and startup incubators to search for alternative avenues to bring internal ideas and innovations to market

Covur | South Bend, IN — May 2018- May 2019
Junior Web Developer - Intern (AngularJS, NodeJS)

- Expedited payment and billing process for over 50 local businesses by leading development of automatic billing feature
- Saved local business partners an average of 10 hours per week and increased their customer retention rate by designing autonomous emailing/promotion feature
- Maintained high-quality and sustainable code by implementing backend unit tests and integration tests for over 30 new features
- Designed custom image filters for streamlined email creation reaching 15000 consumers

Promazo: General Electric | South Bend, IN — July 2018- August 2018
Software Engineer - Intern (AngularJS, NodeJS)

- Improved employee monthly report lifecycle for 90 GE employees by constructing a memo application using the MEAN stack
- Eliminated irregularity and discrepancies of malformed reports by designing an api that generates a standardized and styled pdf for corporate reports
- Scaffolded front-end views of the memo app to interact with Mongo database and comply with GE standards and mock ups

Projects

Porogram | League of Legends Stats App — 2018

- Displays complete personalized user statistics for the game League of Legends by communicating with Riot Games API through NodeJS server
- Provides seamless user experience by generating dynamic web and mobile friendly frontend app using ReactJS and Material Design

Who Else Feels the Pain? | Data Science Project — 2019

- Provided insights on how certain industries were impacted financially from the effects of significant terrorist attacks using pandas, numpy, and matplotlib
- Compared observations of weekly trends within top industry ETFs to dates of active and significant terror activity using K-means clustering and linear regression

Honors and Activities

Dean's List - College of Engineering — 2017- 2019
Linux Users Group | Member — 2017- 2019
Asian American Association | Member — 2017- 2019
University of Notre Dame Hackathon | Second Place — 2018
AT&T Hackathon | Best Entertainment Solution — 2018