Naveen Raman

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LINKS

Github:// naveenr414
LinkedIn:// naveen-raman

COURSEWORK

UNDERGRADUATE

Algorithms I, II
Applied Cybersecurity I, II
Computer Systems
Computer Vision
Cryptography
Data Structures
Databases
Discrete Structures
Linear Algebra I, II
Object Oriented Programming
Partial Differential Equations
Probability Theory
Programming Languages
Real Analysis
Reverse Engineering
Statistical Theory

GRADUATE

Computational Geometry
Quantum Computing

SKILLS

LANGUAGES

C • C++ • Python • Java
Javascript • x86 Assembly
HTML/CSS • SQL • Bash/Unix • LaTeX
Mathematica • Haskell
Rust • Ruby • Ocaml

TECHNOLOGIES

Flask • Django • Node.js • React
MongoDB • Scikit-learn • Jupyter
JQuery • Git • Keras • TensorFlow
Pandas • Docker • AWS

ACTIVITIES

Bloomberg Codecon Maryland Top 3
Bitcamp Hackathon Technology Team
Bloomberg Codecon Finalist
Honorable Mention MCM Math Modelling Competition
Engineers Without Borders
Puzzle Club Vice President
Startup Shell Director
Quizbowl

EDUCATION

UNIVERSITY OF MARYLAND COLLEGE PARK

BS Computer Science and Statistics - Anticipated May 2022
GPA: 4.0

- Presidents Scholarship, Capital One Deans Scholarship, Corporate Partners in Computing Scholarship, Iribe Scholarship
- ACES Cybersecurity, Computer Science Honors College

EXPERIENCE

FACEBOOK - Software Engineering Intern

May 2020 - August 2020

- Developed full stack web application using React+Hack to debug issues with ranking models, and shipped code into production after rounds of UI testing
- Reduced processing time of Presto SQL queries from minutes to seconds
- Presented app at code reviews, and is now regularly used by ranking engineers

CMU SOFTWARE ENGINEERING RESEARCH FOR UNDERGRADUATES (REU) - Research Intern

May 2019 - August 2019

- Developed a classifier to detect toxicity in online communities
- Utilized Scikit-Learn, NLTK and Spacy libraries to develop an SVM classifier that achieved 91% precision and improved F-Score by 10%
- Published and presented at ICSE 2020 Software Engineering Conference

CENTER FOR MACHINE LEARNING - Research Intern

August 2019 – Present

- Investigated algorithms to balance profit and fairness for Rideshare matching
- Employed machine learning algorithms via Tensorflow and Scikit-learn to develop deep learning algorithms via Markov Decision Process framework
- Utilized Montle Carlo simulations to approximate Shapley value of drivers
- Discovered Pareto Optimal policies, and submitted to AAAI conference

CLIP NLP LAB - Research Intern

August 2019-Present

- Developed web application using React + Material UI to collect data on entity links for Question Answering datasets
- Presented preliminary research on entity linking at MASC SLL NLP conference

UMD COMPUTER SCIENCE - CMSC Teaching Assistant

January 2019 - Present

- Taught CMSC 330 and CMSC 389O, teaching Ruby, OCaml, and Algorithms
- Developed quizzes, tests, projects, and held discussions for 40 students

PROJECTS

FINBOT - ChatBot to help people with mental health issues

- Designed a Naive Bayes Classifier+Sentiment to determine risk level
- Employed sentiment analysis and parse trees to accurately talk to users
- Won best Machine Learning Hack at HopHacks

2 DOWN - collaborative crossword solving

- Employed a Node.js backend using Sockets.io to create a web app that allows users to solve crosswords in real time with other users
- Used a JQuery and HTML/CSS based front end to display the crossword