Varan Culanathan

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EDUCATION

UMASS AMHERST
B.S. in Computer Science
Expected May 2018 | Amherst, MA
Dean's List (All Semesters)
Cum. GPA: 3.98 / 4.00

COURSEWORK

- Software Engineering
- Discrete Mathematics
- Introduction to Probability
- Functional Programming
- Data Structures

LANGUAGES

Proficient:
Java | Shell | Python | SQL | LaTeX

Familiar:
C | Scala | HTML/CSS | Javascript

ENGINEERING

Infrastructure: AWS | Ansible | Docker | Jenkins | Terraform | Teleport
Databases: MongoDB | SQL
Backend: NodeJS
Native: Android

AWARDS

Course Citation   2017
Discrete Mathematics
Ranked amongst the top 15 students in a class of over 200 students

Course Citation   2016
Computer System Principles
Ranked #2 in a class of over 150 students

Course Citation   2015
Data Structures
Ranked #4 in a class of over 150 students

PROJECTS

- Minesweeper   June 2016
A complete version of Minesweeper with fully functioning GUI and custom art. *Java*
- KeyFinder   Jan 2015
Control a person in a two-dimensional maze to find a hidden key. *Android Studio, Java*

WORK EXPERIENCE

TRINETX | Software Engineering Intern
May 2016 – Sept 2016 | Cambridge, MA
- Improved and increased automation of appliance provisioning process.
- Created a set of utility scripts to obtain the health status of appliances based on network connectivity, port connectivity, and NIC bond configuration.
- Performed ad-hoc tasks to improve monitoring and maintenance of AWS.
- Refactored codebase and helped create a custom Sonarqube profile to maintain cleanliness of future code.

UMASS AMHERST | Teaching Assistant / Grader
Sept 2016 – Jan 2017 | Amherst, MA
- Help lead discussion sections with other TAs and meet weekly with Professor to modify and improve discussion sections to suit students' needs
- Grade homework and project submissions by students

TRINETX | Implementation Analyst Intern
May 2016 – Sept 2016 | Cambridge, MA
- Designed and implemented feature to export audit and query history pages to CSVs.
- Wrote and Tested SQL Scripts to assess the cleanliness of healthcare organizations' databases.
- Completed data refreshes, data ingestion, and data mapping of healthcare organizations' data.

RESEARCH

RBR LABRATORY | Research Assistant
Oct 2015 – May 2016 | Ithaca, NY
- Worked under Professor **Shlomo Zilberstein** to investigate the methodology used to calculate the impact factor of a journal.
- Developed efficient crowd-sourcing techniques to gather a dataset of 1000 publications for analysis
- Created a tool to calculate the impact factor of any given year within a 15 year range and the magnitude of change if the publication date of the papers in the subset was delayed.
- Publication submitted

IESL LABRATORY | Research Assistant
Oct 2015 – Sept 2016 | Amherst, MA
- Worked under Professor **Andrew McCallum** to develop an efficient crowd-sourcing method to extract large lists of information from CVs
- Designed a pipeline to obtain a knowledge base of 5000+ professors and graduate students to be used in determining conflict of interest for peer reviews.
- Research was accepted by Massachusetts Statewide Undergraduate Research Conference (April 2016).