

Manish Aryal

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EDUCATION

Tufts University

Medford, MA

BS in Computer Science

May 2021

GPA 3.79

Dean's List: All Semesters

Microsoft Student Partner 2019

SKILLS

Languages: C #, Java, Javascript, Python, C, C++, Swift, Assembly, Bash, LaTeX, VHDL
Frameworks/Platforms: Django, Universal Windows Platform, Node.js, React, Flask, Pytorch, Openface
Tools and Technologies: PostgreSQL, MongoDB, Docker, Vagrant, Crontab, Travis, Git, Linux, Raspberry Pi, Visual Studio Android Studio, Xcode, Socket Programming, Postgis, GeoDjango, Solr

RELEVANT COURSEWORK:

Algorithms, Data Structures, Software Engineering, Web Programming, Networks, Linear Algebra, Machine Structure & Assembly Programming, Artificial Intelligence, Machine Learning, Theory of Computation, Data Analysis

Teaching Assistant: Web Programming(Fall 19, Spring 19), Computational Theory(Fall 19), Machine Structure & Assembly Language(Fall 18)

WORK EXPERIENCE

Harvard Graduate School of Education (Django)

Harvard, MA

Software Developer

Jun 2019 – Aug 2019

- Developed the backend server to handle the realtime upload and processing of videos from Xbox Kinect sensors.
- Incorporated face recognition on the live footage from the sensors with automated upload of the recognized images

CUAHSI (Django)

Alewife, MA

Software Developer Intern

Dec 2018 – Present

- Implemented dashboard functionality to allow users to retrieve resources from connected hydrologists.
- Researched on efficient mechanisms on parsing and storing WaterShed Boundary Dataset shape files
- Replaced the iRODS fileSystem with Django FileSystemStorage

Center of Engineering Education and Outreach (Flask, Socket.io)

Medford, MA

Software Engineering Intern

Dec 2018 – Jan 2018

- Expanded the IDE with Raspberry Pi commands using blockly library and socket IO for real-time compiling.
- Improved existing features with addition of searching, auto completion, downloading file, uploading file.

Microsoft Innovation Center (C# UWP)

Kathmandu, Nepal

Windows Developer Intern

Aug 2016 – Sep 2016

- Developed Windows kiosk application to simulate a receptionist with Graphic user interface and NL interface.

PROJECTS

Youth Education Forum (Django, React)

Sep 2018 – May, 2019

- Designed the database models to create tournaments and teams, and simulate matchups in debate tournaments.
- Implemented Django REST APIs endpoints to update database entries and retrieve the most recent updates.

Muji (Node.js, Heroku)

Sep, 2019

- Built a [website](#) using DeepAffects and Spotify API to create a playlist based on the user's mood reflected by their voice.

Universal Turing Machine(C)

Feb, 2018

- Constructed a Turing complete RISC emulator that handles 14 operations including arithmetic, logic, I/O.
- Optimized the emulator by increasing cohesion, in-lining functions, reducing pointer references.

Chess Simulator (Java)

Feb, 2019

- Developed chess game using factory pattern and visitor pattern.