

EDUCATION

Master's Degree – Computer Science	2020
University of Southern California, Viterbi School of Engineering	
Bachelor of Technology – Computer Science	2018
Amrita Vishwa Vidyapeetham, School of Engineering	

SKILLS

Languages: Python, JavaScript, TypeScript, C++, C, C#, HTML/CSS, PHP and Java

Web and Database: Angular, NodeJS, Express, React, CanvasJS, Bootstrap, Android, MySQL, MongoDB, REST, SQLAlchemy, PostgreSQL, Flask

Tools: Git, STL, VR, Unity, ZeroMQ, NetworkX, LaTeX, Makefile, AWS and Azure

INDUSTRY EXPERIENCE

Kaspect, Research Intern May 2019 – Present

- Crafted an interop process between ZeroMQ and Flask to orchestrate tele therapy sessions through VR.
- Trained a 2-layer connected Neural Network to drive a Tendon-Driven robotic Leg and performed virtualization with TensorBoard.

Tools: HMD (Oculus), Unity, C#, Python, Flask, JS, HTML/CSS, Azure

Vigilance Risk Solutions, Consultant to Aug 2019 – Dec 2019

- Engineered a software platform for client with a team of 7 as a life cycle planner under guidance of prof. [Barry Boehm](#).
- Employed the *Incremental Spiral Model (ICSM)* to create life cycle and project plans. Prototyped the front-end.

Tools: COTS (Ruby on Rails, PostgreSQL)

Corto, Intern May 2019 – Aug 2019

- Modeled co-occurrence graphs on emotional tonalities from twitter and reddit audience data using NetworkX.
- Automated and refactored large codebases to optimize optimize performance by integrating with command line options.

Tools: NLTK, NetworkX, Python

National Remote Sensing Centre, Student Consultant Sept 2017 - Dec 2017

- Devised a Proof of Concept for disaster and location identification on real-time twitter data.

Tools: Python, Twitter API, MongoDB

Defense Research Development Organization, Research & Innovation, Intern May 2016 - Jul 2016

- Devised an optimized constrained random number-based assembly trace generator for data hazard detection.
- Attained a *Python* testing environment that serves as a baseline to gauge an out-of- order superscalar microprocessor performance.

ACADEMIC PROJECTS

[Weather Search application](#) – HTML5, Bootstrap 4, Angular 2+, Node.js, Android (JAVA) Aug 2019 – Nov 2019

- Created weather search application to fetch weather details of cities and current location in three different technologies
 1. PHP – HTML/CSS & JS for client-side interactions. PHP for server-side computing.
 2. Responsive Website - Angular 7, CanvasJS, ChartJS, HTML5, Bootstrap 4 and Server interaction with Express.js.
 3. Android - Mined images dynamically using Google API's rendered using Glide and Express.js backend.
- Obtained location-based weather information using Google Geocode, IP-API, Google Custom Search and Dark Sky API. Deployed on Amazon Web Services Elastic Beanstalk.

Weenix, Operating System – C, GNU Debugger (GDB) Jan 2019 – Apr 2019

- Developed a non-preemptive kernel with a team of 4 and designed user shells to perform basic operations.
- Implemented virtual file system, memory and synchronization for processes and thread switching.

PERSONAL PROJECTS

[Corona Chat Info](#) – HTML5, React, Typescript, Twilio, Python – Flask Apr 2020

- Created endpoints to send and receive messages through Whatsapp - Twilio and Flask server.
- Implemented localization enabling translation to any local language of choice using *React-i18next*

[Connect](#) – HTML5, ReactJS, FastApi, Google Maps Apr 2020

- Ideated and built the UI and UX for application aimed to help daily wage workers find jobs in **COVID-19**.
- Integrated Google Maps within React framework. Top 10 submissions for The Global Hack.

Adventure Biofeedback – JavaScript, Flask-Python3 Apr - May 2020

- Achieved live synchronous voice recording and audio transfer between patient and proctor.

LEADERSHIP AND AWARDS

- 2nd place winner, IBM's Favorite Safety Hack at "TreeHacks" 2019 at Stanford University. 2019
- 3rd place in the PayPal API challenge at CalHacks5.0, at UC Berkeley. Donated \$750 prize amount to Shirley Ryan Ability lab. 2018
- Awarded the OUTSTANDING student for the class of 2018. 2018
- Invited Speaker, at "Niyanthra" hackathon by National Instruments to present heart rate monitoring shoes. 2017
- Mentored undergraduate students to learn to code through the HackerEarth Ambassador program & coordinated 3 technical events. 2017