Anjan Amarnath

aamarnat@usc.edu • anjan-amarnath.com • linkedin.com/in/anjan-amarnath • github.com/aamarnath2

EDUCATION

University of Southern California | Los Angeles, CA

August 2016 - May 2020 (Expected)

Bachelors of Science in Computer Science and Business Administration

Relevant Coursework: Introduction to Programming, Data Structures and Object Oriented Design, Discrete Methods in Computer Science, Principles of Software Development, Introduction to Algorithms and Theory of Computing

SKILLS

Languages: Java, C++, Python, JavaScript, SQL, HTML/CSS

Tools: Git, MongoDB, Wireshark, Kismet, Aircrack-ng, tcpdump, Balsamiq, Sketch

PROJECTS

CourseMash (Java, JavaScript, HTML, CSS)

March 2018 - May 2018

- Utilized USC Schedule of Classes API to build web app where students collaborate through a forum-like platform
- Implemented "SOS requests" through multithreaded code to notify all other users and request immediate help
- Maintained and updated SQL database on server side through use of JDBC, JSPs, servlets, and sessions

Elemental Brawlers (Java)

April 2018

- Leveraged socket programming to create multiplayer game where users choose team of brawlers to battle others
- Used multi-threaded code to ensure game server could handle multiple games being played simultaneously

Mini Dog Adoption (Node.js, HTML, CSS, MongoDB)

March 2018

- Defined schemas and models for dogs and users for use in building MongoDB database through CRUD operations
- Integrated Express.js and Dog API framework to create and handle "Post", "Social", and "Adopt" route paths
- Established authentication of users by leveraging passport is, sessions, basic cryptography, and serialization

Hive (HTML, CSS, JavaScript)

January 2017 - May 2017

- Selected as one of eleven developers from pool of 190+ applicants in LavaLab's Spring 2017 Cohort
- Created MVP for a web platform that helps students connect with mentors by utilizing university alumni networks
- Pitched business plan to 100+ people: VCs, USC faculty, and USC students at LavaLab's Demo Night

WORK EXPERIENCE

Electric Power Research Institute (EPRI)

Palo Alto, California

Summer Intern – Cybersecurity Research

May 2018 – August 2018

- Developed Python GUI using Tkinter framework for timing security analysis and evaluation of three GPS receivers
- Conducted Wi-Fi, Bluetooth, DECT, ZigBee, RFID, and Smart Card attacks using wireless pentesting techniques
- Drafted DoE proposal for creation of EV charging infrastructure cybersecurity standards/reference architecture

Summer Intern – Cybersecurity Research

May 2017 - August 2017

- Researched 60+ IoT cyber security vendors and developed framework to determine best solutions for utilities
- Contacted five industry-leading IoT vendors and initiated steps for future research/collaboration with EPRI
- Documented state of IoT security, industry best practices, and best vendor solutions in internal white paper

ThinkTank Learning

Cupertino, California

Programming Intern

June 2015 - August 2015

- Created a web application for tutors to share with clients in order to study for the remodeled SAT
- Utilized Python web-scraping tool to scrape Khan Academy data and populate databases with test cases
- Collaborated with twelve other interns split into four different groups throughout the summer

LEADERSHIP & ACTIVITIES

Lavalab, Product Manager/Developer

3D4E, Team Leader

Makers, Associate Director of Events

Kicks for Kids, Volunteer

Joint Education Program, Computer Science Mentor

Monta Vista Varsity Soccer, Captain

Boy Scouts, Eagle Scout with Bronze and Gold Palms

January 2017 - Present

January 2017 - Present

September 2016 - Present

September 2016 - Present

January 2018 - May 2018

November 2013 - February 2016

August 2014 - July 2015