Anjan Amarnath

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EDUCATION:

University of Southern California | Los Angeles, CA — August 2016 - May 2020 (Expected)
B.S. in Computer Science/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: Node.js, 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.js, 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 - Present
- 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

Joint Education Program, Computer Science Mentor — January 2018 - May 2018
Lavalab, Product Manager/Developer — January 2017 - Present
3D4E, Team Leader — January 2017 - Present
Makers, Associate Director of Events — September 2016 - Present
Kicks for Kids, Volunteer — September 2016 - Present
Monta Vista Varsity Soccer, Captain — November 2013 - February 2016
Boy Scouts, Eagle Scout with Bronze and Gold Palms — August 2014 - July 2015