Anjan Amarnath

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

EDUCATION

University of Southern California, Viterbi School of Engineering

GPA: 3.6

Bachelor of Science in Computer Science and Business Administration

May 2020

Master of Science in Computer Science

Dec 2020

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

SKILLS

Languages: Java, C++, Hack, PHP, React.js, JavaScript, Node.js, SQL, HTML/CSS **Tools:** JUnit, MongoDB, Git, Mercurial, Wireshark, Kismet, Aircrack-ng, Ant, Balsamiq

EXPERIENCE

HackSC

Los Angeles, California

Dec 2018 – Present

Lead Director of Logistics

- Led 25 event organizers over five months to plan and coordinate the venue, food, and transportation logistics
- Managed \$140,000 budget for event with 1000+ attendees and negotiated with vendors to stay within budget
- Created incremental schedule to keep 25 event organizers accountable and working throughout the 36 hour event

Facebook

Menlo Park, California

Software Engineering Intern

May 2019 - August 2019

- Utilized Hack/PHP and React.js to create privacy debugging tool for Facebook Integrity's Single Review Tool
- Developed and implemented generic action handlers for all SRT tools to enable users to perform automated fixes
- Improved user efficiency for 15K clients by reducing number of privacy/permission related on-call tasks by 10%

Electric Power Research Institute (EPRI)

Palo Alto, California

Cybersecurity Research Intern

May 2018 – Aug 2018

- Developed Python GUI using Tkinter framework for timing security analysis and evaluation of 3 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

Cybersecurity Research Intern

May 2017 - Aug 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

PROJECTS

Smart Rebounder (Rasberry Pi, Python,, OpenCV,)

Aug 2018 – May 2019

- Developed basketball hoop attachment that rotates rebounding attachment based on player's position on court
- Used OpenCV to track shooter position via webcam and an Atmega328 device to automate servo motor

CourseMash (Java, JavaScript, HTML, CSS, SQL)

Mar 2018 – May 2018

- Utilized USC Schedule of Classes API to build web app where students collaborate through 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

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

Mar 2018

- Defined schemas and models for dogs and users for use in 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

LEADERSHIP & ACTIVITIES

Makers, Director of Events	Sep 2018 – Present
Association for Computing Machinery, Mentor	Sep 2018 – Present
Scope, Developer	Jan 2018 – Present
LavaLab, Developer and Product Manager	Jan 2017 – Present
Joint Education Program, Computer Science Mentor	Jan 2018 – May 2018
Boy Scouts, Eagle Scout with Bronze and Gold Palms	Aug 2014 – Jul 2015