

Anjan Amarnath

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EDUCATION

University of Southern California, Viterbi School of Engineering GPA: 3.70
Bachelor of Science in Computer Science and Business Administration May 2020
Master of Science in Computer Science Dec 2020
Relevant Coursework: Analysis of Algorithms, Foundations of Artificial Intelligence, Database Systems

SKILLS

Languages: Java, Python, C++, Hack, PHP, C#, JavaScript, SQL, HTML/CSS, React.js
Frameworks/Tools: .NET, AWS (EC2, Lambda, RDS, S3, DynamoDB), Docker, Kubernetes, CloudFormation

EXPERIENCE

Amazon Web Services Remote
Software Development Engineer Intern June 2020 – August 2020

- Developed a [public workshop](#) to demonstrate how to migrate monolith .NET applications to microservices
- Applied Strangler Fig pattern using AWS (EC2, RDS, DynamoDB, Lambda, Aurora), .NET Core, and Docker
- Created CloudFormation templates to automate the deployment the infrastructure for 6 CI/CD pipelines

University of Southern California Los Angeles, California
Course Producer (CSCI 350) and Teaching Assistant (ITP 115) January 2020 – Present

- Guiding student understanding in Operating Systems (120 students) and Programming in Python (600 students)
- Leading weekly office hours, responded to student questions on Piazza, and graded programming assignments

HackSC 2019, 2020 Los Angeles, California
Lead Director of Logistics Dec 2018 – Mar 2020

- Led 25 event organizers over five months to plan and coordinate the venue, food, and transportation logistics
- Managed \$140,000 budgets for events with 1000 attendees and negotiated with vendors to stay within budget

Facebook Menlo Park, California
Software Engineering Intern May 2019 – August 2019

- Utilized Hack/PHP and React.js to create automated privacy debugging tool for Facebook’s Single Review Tool
- Refactored existing action handlers to be more generic for all existing and future SRT platform tools
- Improved user efficiency for 15K clients by reducing number of 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 pen test analysis of 3 GPS receivers
- Drafted DoE proposal for EV charging infrastructure cybersecurity standards that earned \$3 million grant
- Conducted mini Wi-Fi, Bluetooth, ZigBee, RFID, and Smart Card attacks using wireless pen testing techniques

PROJECTS

Smart Rebounder (Raspberry 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 of a request for 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 – May 2020
LavaLab, Developer and Product Manager Jan 2017 – May 2020