

APURVA HITESHKUMAR PATEL

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EDUCATION

University of Southern California

May 2022 - December 2023

Master of Science in Computer Science

GPA: 3.85/4.00

- **Coursework:** Analysis of Algorithms, Security Systems, Web Technologies, Machine Learning, Information Retrieval.

L.D.R.P Institute of Technology and Research, KSV University

August 2017 - September 2021

Bachelor of Engineering in Computer Engineering

GPA: 9.16/10

- **Coursework:** Data Structures, Operating Systems, Software Engineering, Computer Networks, Big Data, Database Systems.

TECHNICAL SKILLS

- **Programming Languages / Databases:** Python, R, C, C++, C#, Java, JavaScript, TypeScript, SQL, AWS: S3 and DynamoDB.
- **Web Technologies:** Angular, React, NodeJS, JSON, Bootstrap, jQuery, HTML, CSS, REST, ExpressJS, AJAX.
- **Frameworks/Tools:** Git, Android Studio, Unity, Arduino UNO, Flask, Django, AWS: Lambda, IAM, SES, Cognito, Amplify.
- **ML/Big Data:** Hadoop/MapReduce, Spark, Pandas, NumPy, Scikit-learn, OpenCV, Seaborn, Keras.

WORK EXPERIENCE

Lily and Fox

Robotics and Software Engineer

February 2024 - Present

Elk Grove Village, Illinois

- Developing a predictive inventory management system using **Python** to forecast future inventory needs, optimizing stock levels and reducing shortages.
- Creating the frontend interface for the system using **React** and **JavaScript**, ensuring a user-friendly experience for inventory management personnel.

Amazon.com, Inc

Software Development Engineer Intern

May 2023 - August 2023

San Diego, California

- Developed the Golden Gate UI, a user-friendly interface for seamless file uploads to Amazon S3 and data verification against the Andes Database. Utilised **React**, **Typescript**, and various AWS services, including **AWS Amplify**, **S3**, and **Cognito**.
- Collaborated with the DASH team to create User and Identity Pools, lambda functions, and S3 buckets. Seamlessly configured to establish an efficient CI/CD data pipeline leveraging **AWS CDK**.

The Sparks Foundation

Web Developer Intern

January 2021 - February 2021

Remote, India

- Engineered a secure and robust banking website to cater to customer needs, and employed a stack of modern technologies. Frontend development involved crafting the user interface with **HTML**, **CSS**, and **Bootstrap**, ensuring an intuitive and responsive design.
- Deployed **Node.js** on the backend to create a high-performance server for thousands of concurrent transactions, employing secure encryption algorithms for customer data protection.

PROJECTS

Martian Frost Detection (CNN, EfficientNetB0, ResNet50, VGG16, Python, Tensorflow)

November 2023 - December 2023

- Implemented CNN models (EfficientNetB0, ResNet50, VGG16) on live JPL data, optimizing hyperparameters for EfficientNetB0 and achieving a 91% accuracy in Martian surface frost identification.

Event Finder (Angular, Python, NodeJS, Bootstrap; Mobile App: Android Studio, Java)

February 2023 - April 2023

- Completed a project with core features enabling users to search for nearby events, access event details, and add events to their favourites using data sourced from the TicketMaster Discovery API. Additionally, the project facilitated artist discovery within events by seamlessly integrating the Spotify API.
- Built a web app (Angular) and an Android app (Java) with a shared backend in Node.js.

RFID-based Smart mall (Arduino UNO, C++)

February 2019 - April 2019

- Formulated an RFID-based system to efficiently identify items in a shopping mall, reducing customer wait times at checkout counters.
- Initiated and executed Arduino UNO programming for mall checkout doors, automating item scanning for streamlined, efficient customer processing and displaying total prices on-screen. Reducing average waiting time by 5 minutes.

LEADERSHIP AND INVOLVEMENT

- Led a team to advance to the final round of the Gujarat Industrial Hackathon 2019, a prestigious competition featuring participation from over 500 teams, held in April 2019.
- Earned a Certificate of Merit for achieving **1st rank** in 3rd year of Computer Engineering, as part of the Shri Maneklal M. Patel Memorial Merit Scholarship program on January 12, 2020.