**Raj Patel**

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**EDUCATION**

**University of Southern California**, CA, USA August 2019-May 2021

* Master of Science (M.S), Computer Science GPA: 3.73/4
* Courses: Web Technologies, Analysis of Algorithms, Foundations of Artificial Intelligence, Foundations and Applications of Data Mining, Deep Learning and Its Applications, Information Retrieval and Web Search Engines

**Gujarat Technological University (Alpha College of Engineering)**, Gujarat, India August 2015-May 2019

* Bachelor of Engineering (B.E), Computer Engineering GPA: 9.16/10
* Courses: Data Structures, Theory of Computation, Compiler Design, System Programming, Software Engineering, Database Management System, Object-Oriented Programming Principles

**TECHNICAL SKILLS**

* **Languages**: Python, JavaScript (ECMAScript 6), TypeScript, Java, C, C++, HTML, CSS, Scala, PHP
* **Databases**: MySQL, SQLite, DynamoDB
* **Libraries, Frameworks and Tools**: NodeJS, ReactJS, Django, Flask, AWS Lambda, Serverless, AWS CDK, Jest, CI/CD Code pipelines, Lerna, React-Native, Android, Bootstrap, Git, Sass, Spark, Vue.js, Expo, jQuery, Keras, ExpressJS

**WORK EXPERIENCE**

**Software Development Engineer Intern, Convrrt Inc**, AZ, USA September 2020-March 2021

* Development of grid-based web page builder’s UI components in Vue.js
* Created UI and APIs for an admin dashboard which reduced demo account building time by 10 times.
* Feature flagged the existing codebase which will reduce development cost for prospective customers

**Software Development Engineer Intern, Amazon.com Services LLC**, WA, USA May 2020-August 2020

* Created a Cards Marketplace application in native AWS for a Content Execution internal tool used in amazon.com
* As a part of my project, integrated data from 3 data sources managed by different teams
* Used AWS CDK and Lerna to create backend infrastructures like AWS Lambda and API gateways
* Developed prefetch caching mechanism using DynamoDB and Serverless Lambda which reduced network calls by 8 times per page and decreased page loading time by 80%
* Used TypeScript with NodeJS, ReactJS, and Jest for Unit testing (100% code coverage) in CICD workflow

**Software Development Engineer Intern, Brainasoft**, Gujarat, India February 2019-June 2019

* Development of RESTful APIs for the company’s products using Python-Flask and PHP to add 10 new features.
* Created a marketplace full stack mobile application in React-Native with PHP backend.
* Designed an affiliate marketing system with a dashboard in PHP, MySQL. Which increased sales by 10-15%.

**PROJECTS**

**News App – Responsive React SPA and Android App** (ReactJS, NodeJS, Android, Bootstrap4, AWS lambda)

* ReactJS Single page application and Android application for news articles having NodeJS running on AWS lambda
* Implemented bookmark functionality by local storage, Search with autosuggestion and sharing option to social media

**Smart RSVP** (Python, Django, Bootstrap, ORM with SQLite3, ChartJS, Ajax)

* Developed a web app that counts event attendees using a QR code (Generated by Host) on an invitation card
* Each QR code has a unique string generated by MD5 hash.

**React Native Signup Login Application** (React-Native, Expo, Python, Flask, MySQL, OAuth, JWT)

* Created using Expo and Python flask backend API which handles registrations and login with and without OAuth. It is an open-source project that anyone can use for their project for signup and login functionality.

**Image classification of the distracted driver** (Python, Machine learning, Deep learning, Keras, CNN)

* Classified image of a driver and Model predicts activity of driver from ten classes (Ex. Safe driving, texting, calling etc.) using Convolutional Neural Network. Gained almost 98% accuracy on the test dataset.

**Discussion Forum website** (Java, Servlet, JSP, DAO (Data Access Object))

* Developed a discussion Forum website in J2EE, Servlet and JSP. Hosted it for college students for 1 month.

**Smart Building - Society Management System** (PHP, MySQL database, Bootstrap)

* Alert broadcasting, payment reminder, automatic fine calculator for late payments, event booking, etc.

**LEADERSHIP, ACHIEVEMENTS AND EXTRACURRICULAR ACTIVITIES**

* Led a team in Hackathon organized by **GirlScript Foundation** (2017) and created a Smart Card based Health-Care management system using PHP and MySQL
* Awarded **Certificate of Excellence Top Ranker** 2 times from **Dewang Mehta Foundation Trust** (2017, 18)
* Amongst top 3 contestants in the inter-college coding competition organized by **Gandhinagar Institute of Technology**

**CERTIFICATIONS**

* Machine Learning by Stanford University on Coursera (October 2018)
* Deep Learning, a 5-course specialization by deeplearning.ai on Coursera (January 2019)
* Algorithmic Toolbox by University of California San Diego on Coursera (June 2019)