

Ishan Rajesh Madan

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EDUCATION

Santa Clara University (SCU), California

September 2018 – June 2020

Pursuing MS in Computer Science and Engineering.

Thadomal Shahani Engineering College (TSEC), University of Mumbai

August 2014 - May 2018

Completed Bachelor of Computer Engineering.

TECHNICAL SKILLS

- **Programming languages & OS** – Python, Java, JavaScript, C#, C++, Windows, Linux, MacOS.
- **Cloud Technologies** – Google Cloud Platform, Amazon Web Services, Kubernetes, Docker.
- **Web Technologies** – Django, NodeJS, Flask, Express, REACT, Bootstrap, CSS, JavaScript, HTML5, REST APIs.
- **Database** – MySQL, SQLite, Firebase, PostgreSQL, MongoDB.
- **Source Control Management** – Git

PROFESSIONAL EXPERIENCE

Rescale Inc, San Francisco

June 2019 – December 2019

Software Engineering Intern

- Worked on creating backend support for Google Cloud Storage, on their Django web platform and windows desktop app.
- Implemented API endpoints to allow clients to perform file transfer to and from the Rescale platform, using file uploader.
- Updated the java transfer library to allow clients to transfer files using the Rescale client java API.
- Implemented the backend endpoints used for transferring files, for the windows desktop application, using C#.
- Worked with the frontend team to integrate the file uploader with the new REACT frontend interface.
- Wrote integration tests, unit tests and automated UI tests using selenium, for testing backend and frontend code.

Air India Ltd, Mumbai

June 2017 – July 2017

Android Developer Intern

- Developed an emergency SMS or e-mail sending application using Android Studios, PHP, XML, JSON and MySQL.
- Built an online MySQL database to retrieve the contacts to which the message/email is to be sent.
- Incorporated features to allow admin-level users to re-configure the database.
- The android application is currently used by all staff members of the Department of Information Technology (DIT).

Amaze Lifestyle Products Private Ltd., Mumbai

July 2017- Oct 2017

Software Engineering Intern

- Extracted data from multiple sources in different source formats using BeautifulSoup, urllib, Selenium, python, etc.
- Pre processed and cleaned data using pandas and python, for ingestion into MongoDB and Elasticsearch databases.
- Used Google Cloud Platform (GCP) to run and test all python scripts and subsequently store all the data collected.
- Saved the company a lot of time and resources by automating the process of data retrieval from 24 High Courts.

SELECTED ACADEMIC PROJECTS

Charity Donation DApp ([git-link](#))

- Built a test blockchain network using Ethereum and deployed solidity written smart contracts on it using truffle.js, web3.js.
- Built a web application using HTML, CSS and Bootstrap, to simulate a payment portal for charity organisations.

SnapSongs Social Media App ([git-link](#))

- Built a social media app which allows users to send and receive music in the form of stories.
- Incorporated the ffmpeg library in order to trim songs to a 15s sample, which would then be uploaded as the story.
- Used Firebase for authentication and storage, and utilised features of android studios such as fragments for the UI.

Real Estate Price Appraisal ([git-link](#))

- Built a user friendly REST API web app using Flask which allowed users to enter inputs such as no of bedrooms, bathrooms, parking slots, location of property, etc and get predicted price as output, for real estate properties in Mumbai.
- Used ensemble regression model viz XGBoost in the backend, to predict prices. Data was extracted from 99Acres.
- Built frontend of the website using HTML, CSS, Bootstrap, and passed parameters to and from backend, in json format.

Movie Rental Application ([git-link](#))

- Built a REST API web app using node.js and express, which allows customers to rent movies according to genres.
- Used MongoDB to store data in the backend and deployed the web app on Heroku. Wrote automated tests using Jestjs.

Deep Learning on Cloud ([git-link](#))

- Used Kubeflow to deploy the training of Tensorflow's object detection model on Kubernetes clusters.
- Deployed different setups of Kubeflow on various Kubernetes supported cloud platforms such as AWS, GCP and Azure.
- Benchmarked and marked the performance metrics of the training of the model on each of these clouds.

Forecasting Indian Stock Market Using ANN ([git-link](#))

- Trained an Artificial Neural Network (ANN) using error back propagation training algorithm, to predict the opening value of Nifty-100 index of the National Stock Exchange (NSE) using previous day's closing values of input parameters.
- Improved testing accuracy using k-folds cross validation algorithm. backpropagation algorithm achieved a maximum accuracy of 77.80 % for the testing dataset