# Saurabh Mylavaram

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# **EDUCATION**

## UNIVERSITY OF MINNESOTA

MS IN COMPUTER SCIENCE

May 2021 | Minneapolis, MN GPA: 4.0 / 4.0

#### **IIT DELHI**

## BTECH IN ELECTRICAL ENGINEER.

May 2017 | Delhi, India

Thesis: Twitter Sentiment Analysis

# LINKS

Github:// M-S-Saurabh LinkedIn:// saurabh-mylavaram Website:// Animation projects

# **COURSEWORK**

## **GRADUATE**

Recommender Systems Computer Vision Artificial Intelligence II Database Systems Animation & Planning in Games

## **UNDERGRADUATE**

Intro to Machine Learning Software design practices Operating Systems Signals & Systems

# **SKILLS**

## **PROGRAMMING**

C++ • Java • Python • Javascript SQL • HTML & CSS • Matlab

## Also worked on:

Android • Latex • Linux • AWS NodeJS • Angular • VueJS

# AWARDS

2011 KVPY research Fellowship 2013 99.98 percentile in IIT-JEE Engineering Entrance Exam

2011 Indian National Jr. Science Olympiad (INJSO) Finalist

## **EXPERIENCE**

## **DELL EMC** | GRADUATE INTERN

June 2020 - July 2020 | Remote

- Developed test automation workflows for MX7000 server chassis using Axon.
- Collects data counters and covered 100% of tests (storage and network workloads) giving the user an overview of system health.
- Led to the discovery of pre-existing problems which caused switch shutdown.

## **SAMSUNG** | Engineer - Data Intelligence

July 2017 - July 2019 | Delhi

- Wrote web-crawlers and parsers to scrape product reviews from the web.
- Proposed and built a solution to increase price data collection by 2 times.
- Ownership of a sub-module 'Task Management System' within the project.
- Took initiative to manage AWS services like EC2, S3, RDS, Lambda, IAM and Cloudwatch for the project.
- Created a dashboard which visualized sentiment analysis results (Vue, Spring).

## **CITIBANK** | Software Engineering Intern

May 2016 - July 2016 | Pune, India

- Designed and built a web-application to track the progress of internal projects.
- Following Agile framework, went from design stage through to multiple iterations by incorporating evolving requirements from users.
- Used MongoDB to store data, NodeJS+Express to expose RESTful APIs and consumed them via an AngularJS based front-end.

# **PROJECTS**

## AI FOR SUPER MARIO | PYTHON | SPRING 2020

Developed a Deep Q-Learning based neural network agent which completed the first level and beats a naive CNN based implementation.

## MOVIE RECOMMENDER SYSTEMS | PYTHON | FALL 2020

- Implemented Content-based (genre & tf-idf based), Collaborative filtering based, and Deep Learning based systems to predict user ratings
- Analyzed metrics like prediction accuracy, top-n ranking, serendipity etc.

## FACE TRACKING | PYTHON | FALL 2020

- Computed SIFT features between image and face template and used RANSAC to get an estimate of affine transform.
- Used Inverse-Compositional image alignment to refine the transform and track face across multiple frames.

## GAME ANIMATIONS | PROCESSING (JAVA) | SPRING 2020

- Implemented particle systems from the scratch to simulate waterfalls, fires and spells. Link: https://tinyurl.com/y6kzapje
- Used spring-mass systems to create natural looking animated cloth.
- Implemented A-star search and RRT based search to plan the motion of crowds of animated creatures.

## **EXTRA CURRICULAR**

Volunteer for Great-Workplace Initiative at Samsung