SUSHANTH SAMALA

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EXPERIENCE

Google, San Francisco Bay Area, California — Jun 2021 – Current
Software Engineer II
- Currently building software for the Google One team.

STRIVR, Palo Alto, California — May 2020 – Dec 2020
Software Engineer Intern
- Built a feature on a WPF app to automate the process of capturing 360 degree screenshot of a Virtual Reality Experience video and converting the screenshots into equirectangular views 90, 270, 360 degree yaw angles apart.
- Developed an API to retrieve these screenshots and a web portal to display these images for easy access to the Data Science team. This removed the manual overhead and reduced the total time needed to get the screenshots by 99.99%.

New York University, New York, New York — Jan 2020 – Aug 2020
Software Engineer Intern
- Developed a search function to scan through an integrated set of data sources for a specific user, deployed it on AWS Lambda; The search function reduced the total search time for each user by 30%.
- Created a user authentication service using AWS Cognito and Shibboleth, and an API to connect to the Lambda search function, this increased the security of the NYU portal substantially.

Fisec Global IT Solutions Pvt Ltd, Hyderabad, India — June 2018 – July 2018
Research Intern (AI/ML)
- Devised a Machine Learning model to convert 2D images of materials to Voxel files using depth estimation techniques, a dataset of 1,000,000 images. As a result, the Model is able to generate 3D files with an accuracy of 80%.
- Automated the process of manually creating 3D models for old, no longer in production parts using the Machine Learning model to be able to manufacture the parts. Reduced the cost required to generate a 3D model by 90%.

Talent Incubator C/O KAARMIC Education Services Pvt Ltd, Hyderabad, India — Mar 2016 – Mar 2017
Fellow
- Led a team of 5 and performed market research on early start-ups. Identified the main challenges of start-ups to be lack of enough online presence, lack of marketing.
- Assembled a web development team and taught them about testing principles and how to choose the right technology for a specific website requirement.
- Built responsive websites for 5 companies under non-negotiable deadlines, negotiated with 3 clients by attending several technology events and networking with people which increased the revenue by 20%.
- Created a website for a client (3Dzyn) using Django as the backend, the site displayed 3D STL files of various objects used for 3D printing services.

SKILLS

- **Coding Languages:** Java, Python, C#, C++, C, Java, HTML
- **Other Tools:** GCP, AWS, Vagrant, Docker, IBM Watson, .NET, PyTorch, Tableau, Python Flask, Git

EDUCATION

New York University, Courant Institute, New York, New York — May 2021
Master of Science, Computer Science
- Relevant Coursework: Fundamental Algorithms, Data Structures, Operating Systems, Mathematical Techniques for Computer Science, Programming Languages, DevOps and Agile Methodologies

Chaitanya Bharathi Institute of Technology, Hyderabad, India — May 2019
Bachelor of Engineering, Computer Science and Engineering
- Relevant Coursework: Discrete Mathematics, Principles of Programming Languages, Database Management Systems, Distributed Computing, Information and Network Security, Computer Networks, Object Oriented Programming

PROJECTS

Intelligent Tutoring System Using Space Repetition Learning (Python) — Spring 2020
- Created a Tutor RL agent to interact with student environment and choose the activities/topics that help students maximize knowledge by carefully analyzing the trade off between learning new topics and revising already learned topics.
- Used a model-free approach with neural network approximation. The agent outperformed various heuristic scheduler algorithms such as the popular Leitner and SuperMemo.

Quora Duplicate Question Detection (Python) — Spring 2020
- Implemented models to identify semantic similarity between questions on Quora with the help of various classical feature engineering techniques and by learning high level features using deep learning.
- Used BERT embeddings with Siamese Network to outperform classical models and achieve an accuracy of 91.7%.

3D Object Detection for Autonomous Driving (Python, CNN) — Spring 2019
- Developed a machine learning model to detect and localize vehicles, pedestrians on the roads captured using LIDAR technology. Used 3D bounding boxes to localize the objects with an accuracy of 82%.