VENKATA SASANK MUDIGONDA

Portfolio | mvshashank08@gmail.com | LinkedIn Profile | Medium Blog | GitHub Profile

EDUCATION

George Mason University

Fairfax, VA

Master of Science in Computer Science (Machine Learning concentration) (GPA: 3.92)

August 2019 – May 2021 (Expected)

Coursework: Machine Learning, Deep Learning, Computer Vision, Algorithm Design and Analysis, Data Mining using Spark, Component-based Software Development, Statistics for Applications

Vellore Institute of Technology

Chennai, India

Bachelor of Technology in Computer Science (GPA: 3.75)

June 2013 – May 2017

WORK EXPERIENCE

George Mason University

Graduate Teaching Assistant

Fairfax, VA

August 2019 - Present

- Working as a Graduate Teaching Assistant for courses: iOS Mobile Development, Advanced Web Development, and Information Visualization
- Responsible for teaching more than 90 students, assisting them with their projects and grading their works on weekly basis

Amazon.com, Inc

Seattle, WA

Software Development Engineer Intern

May 2020 – August 2020

- Built a diagnostic web-based tool to surface the issues of scanning faulty products across all the stores of Whole Foods Market in the country, which helped cut down the response time by more than 50%
- Built an entirely native AWS solution using Lambda (programmed in Java, JS and ReactJS), CloudFormation, API Gateway, S3, and VPCs.
- Completed the entire development process, by writing the design doc, going through design review, sprint story grooming, implementation of frontend in ReactJS and backend Lambdas in Java, going through code reviews, and finally deploying it using CloudFormation.
- Communicated effectively in a timely manner with other teams and integrate external services into the application using VPC

Wavelabs.ai

Machine Learning Engineer

Hyderabad, India

March 2018 – July 2019

- Architected pipelines for data preparation, training, continuous integration and deployment of deep learning applications using TensorFlow
- Built solutions for continuous monitoring and retraining deployed deep learning applications to cut down manual intervention by 70%
- Built containerized training and serving scripts using Docker for training and deployment on AWS SageMaker
- Ideated potential AI driven solutions for clients during design discussions

Wavelabs.ai Full-Stack Software Engineer

Hyderabad, India

June 2017 - March 2018

- Built RESTful web services using Node JS, Spring Boot, and Flask and front-end applications using React JS
- Developed mobile applications based on native Android and React Native platforms
- Containerized enterprise applications using Docker and deployed onto Kubernetes clusters
- Implemented continuous integration and continuous deployment pipelines using Jenkins

SKILLS

Programming Languages: Python, Java, JavaScript, SQL, LaTeX, Swift, PHP, C++, C, R, HTML/CSS

Deep Learning: TensorFlow, PyTorch, Keras, Computer Vision and Deep NLP

Data Engineering: Apache Spark, Hadoop

Data Science Libraries (Python): scikit-learn, Spark MLlib, nltk, OpenCV, Pandas, NumPy, matplotlib, plotly

Mobile: React Native, iOS, Android

REST Frameworks: Spring Boot, Flask, NodeJS

Database: MySQL, MongoDB

Web Application Frameworks (front-end): React JS, Angular 1.6

Cloud Platforms: Amazon Web Services (AWS), Google Cloud Platform (GCP)

DevOps: Docker, Kubernetes, Jenkins

ENTERPRISE PROJECTS

Photo Scoring Service | Client: Care.com | TensorFlow, AWS Sagemaker, Flask, Ngnix

Built and deployed a deep learning model based on a custom Residual Network architecture on AWS SageMaker that can rate profile images based on human aesthetic perception, inspired by Google's Neural Image Assessment (NIMA).

Dinely Mobile Application | Client: Dinely | React Native, Spring Boot, NodeJS

Built a mobile application in React Native that helps users to find nearby restaurants that match their taste, make orders and advanced bookings. Also built an embedded chatbot using Stanford CoreNLP to interact with the users by improving user experience.

ACADEMIC PROJECTS

End-to-end Recovery of Human Shape and Pose | PyTorch, GCP

Implemented the paper "End-to-end Recovery of Human Shape and Pose" as an academic research project to generate 3D models of human bodies across various shapes and poses. Used PyTorch to build the model and trained it using GPUs on Google Cloud Platform (GCP).

SIFT Operator | Numpy, Matplotlib, Jupyter

Implemented the Scale-Invariant Feature Transform (SIFT) operator from scratch using only Numpy from the original paper "<u>Distinctive Image Features</u> from Scale-Invariant keypoints" from David Lowe.