Aayush Vikram Shah

(206)-591-1763 | aayushah@uw.edu | in/aayush-shah19 | aayush1909.github.io | Seattle, WA

WORK EXPERIENCE

***Software Engineering Intern* - TerraClear Inc**, Seattle, USA   **Jun '20 - Present**
- Revamped the data processing pipeline for raw multispectral/RGB drone images to create the COCO dataset for the Convolutional Neural Networks in Linux
- Spearheaded research on image processing techniques for boundary & object detection from stitched orthomosaic images by leveraging OpenCV in Python
- Optimized operational processes of the Computer Vision & AI team by **60%+** and reduced **18+** man-hours per week
- Conducted code reviews and collaborated with cross-functional stakeholders to revamp code review procedures
- Designing & creating a relational PostgreSQL database to preserve JSON based drone data generated from the pilot portal

***Data Analyst Intern* - Puratech Solutions**, Mumbai, India   **Jun '18 - Aug '18**
- Refactored the consumer demographic data collection process and increased operational efficiencies by **12%**
- Collected & analyzed web scraped data in R to derive insights on customer behavior, informing strategies that increased the customer retention rate by **9%**
- Conceptualized and implemented A/B test plans to validate customer hypotheses and understand customer behavior patterns

PROJECTS

***Data Scientist* – ML Driven DNS Malware Detection System**, Seattle, USA   **Mar '20 - Jun '20**
- Developed and deployed RESTful APIs using AWS API Gateway to classify fully qualified domain names as DGA or Benign
- Implemented an XGBoost Classifier using AWS SageMaker on a custom **15 million** dataset uploaded to an AWS S3 bucket
- Scaled the product to **1,000,000+** predictions per minute through AWS Lambda

***Team Lead* - Grocery Retail Sales Analysis**, Seattle, USA   **May '20**
- Analyzed store trends & created Tableau dashboards to recommend high profitability categories & items to store owners
- Predicted revenue of store for the forthcoming months using FBProphet model on accrued time-series data
- Awarded **2nd position** for the best machine learning model at University of Washington hackathon with **200+** participants

***Data Scientist* - Fresh or Rotten?**, Seattle, USA   **Feb '20 - Mar '20**
- Mined & classified Rotten Tomatoes movie reviews as fresh or rotten using Multinomial Naïve Bayes algorithm
- Tuned the model hyperparameters using K-Fold Cross Validation, and used TF-IDF & smoothing to attain **67.03%** accuracy

***Data Analyst* - FIFA '20 Analysis**, Seattle, USA   **Jan '20**
- Evaluated the world's 20 most competitive clubs and assessed which clubs foster the growth of young players
- Predicted player potential for subsequent years with an accuracy of **84%** by applying Lasso and Ridge Regression
- Secured **2nd runner-up position** at the Datathon held at the University of Washington

***Software Developer* - Stock Market Forecaster**, Mumbai, India   **Aug '18 - May '19**
- Designed a real-time stock value predictor for listings on the Bombay Stock Exchange (BSE) using Python
- Implemented a hybrid model of Neural Networks, Support Vector Regression and Sentiment Analysis with an accuracy of **95%**

***Machine Learning Engineer* - Breaking CAPTCHA using CNN**, Mumbai, India   **Oct '17 - Nov '17**
- Evaluated the robustness of a CAPTCHA generator by stress testing using hard-to-comprehend text snippets
- Exposed system vulnerabilities by leveraging CNN for alphabet/digit recognition

EDUCATION

University of Washington   **Seattle, WA**
Master of Science in Information Management (Specialization – Data Science) | GPA: 3.82|4   **Expected: Jun '21**
- **Coursework**: Foundations of Data Science, Machine Learning and Econometrics, Database Management Systems, Scaling and Applications in Data Science, Business Intelligence Systems, Educational Statistics
- **Teaching Assistantships**: Data Science Fundamentals, Machine Learning Methods and AI, Introduction to Programming for Data Science, Foundations of Python Programming, Python Programming Essentials

University of Mumbai   **Mumbai, India**
Bachelor of Technology in Computer Engineering | GPA: 3.7|4   **Aug '15 - Jun '19**
- **Coursework**: Data Structures, Big Data Analytics, Artificial Intelligence, Machine Learning, Image Processing, Data Warehousing and Mining, Neural Networks and Fuzzy Logic, Business Intelligence, Applied Mathematics

SKILLS

Programming Languages: Python, R, Java
Tools & Tech Stack: AWS, SQL, NoSQL, Tableau, PyTorch, Tensorflow, Power BI, Hadoop, MS-Excel, Jira, Git