Shakuntala Mitra

EDUCATION & CERTIFICATIONS

Johns Hopkins University │ M.S. in Artificial Intelligence   Present

University of California, Santa Barbara │ B.S. in Biochemistry & Molecular Biology   2015 – 2019

WORK EXPERIENCE

QUALITY CONTROL ANALYST II   Dec 2022 – Present
Vericel Corporation | Cambridge, MA

- Independently perform quantitative data analysis for molecular biology assays and cell culture assays
- Take ownership of updating, restructuring, and maintaining cell culture assay databases
- Collaborating with R&D on a project to compile and analyze assay data needed to complete Technical Reports

ASSOCIATE DATA SCIENTIST   Sept 2021 – July 2022
AWE Technologies, LLC | Boston, MA

- Established a scalable analysis pipeline by integrating AWS tools with a custom PostgreSQL database during internal algorithm development phase of major client project
- Developed machine learning algorithms and neural networks for anomaly detection using Python, Tensorflow, and PyTorch
- Compiled data visualizations and feature extraction into official progress reports to communicate key results to primary stakeholders

QUALITY CONTROL ANALYST II   Sept 2020 – Sept 2021
Minaris Regenerative Medicine | Mountain View, CA

- Supervised cross-functional team as QC project leader and SME for one major commercial client
- Enabled a client's transition from FDA Phase I to Phase II Clinical Trials by executing stability studies
- Improved processing time by 33% by revising technical documents (SOPs, WIs) for multiple assays

CERTIFICATIONS

Grow with Google │ Data Analytics Professional Certification   2022 – 2022

Springboard School of Data │ Data Science Career Track Certification   2020 – 2021
Advanced Machine Learning Specialization

TECHNICAL SKILLS

Programming Languages: Python, SQL, R

Machine Learning Frameworks: PyTorch, Tensorflow, Keras, Scikit-Learn, OpenCV

Platforms: AWS, Docker, Flask, Heroku, Linux, Jupyter Notebook, MS Excel

PROJECTS

OFFLINE HANDWRITTEN SIGNATURE VERIFICATION

- Distinguished between genuine and forged signatures using Siamese Convolutional Neural Networks built with **Python, PyTorch**, and **OpenCV**

PREDICTING CANCEROUS P53 MUTANTS

- Predicted transcriptional activity and identified potential therapeutic targets for cancerous p53 proteins using supervised classification algorithms using **Python, Scikit-Learn, and Pandas**

DEXTER 2.0 : WHITE BLOOD CELL CLASSIFIER

- Detected and classified types of WBCs from images using Fast R-CNN and YOLO v3. Built with **Python, Tensorflow, Keras, and OpenCV**.