

Akshat Tiwari

in LinkedIn | GitHub | Portfolio | +1 669 213 8894 | tiwariakshatwork@gmail.com

EXPERIENCE

IT Intern - Data Analytics

Atlanta, GA

Primus Builders

June 2024 - Present

- Performed migration of data models/ETL's, data extraction, and validations from DOMO to PowerBI, resulting in overall ease of access for data entry, and increased data processing rates by 300%.
- Trained and implemented LLM model to recognize and organize data entries to align to a certain structure, based on user entries. Included unit testing alongside establishment of a UAT environment within python.

ML Researcher - Predictive Modeling

Santa Cruz, CA

University of California Santa Cruz

September 2023 - Present

- Generated habitat and landcover layers for hundreds of bird species to detect optimal birdwatching locations. Used this to create bird connectivity plots for researchers lacking resources to study birds.
- Implemented Gaussian Maximum Likelihood Model for loss to generate points that determines future optimal connectivity of bird species to their habitats.

ML Researcher - RAG Architecture

Santa Cruz, CA

Association of Computing Machinery

September 2023 - Present

- Wrote Retrieval Augmented Generation model evaluation paper in the context of code retrieval.

Data Engineer Intern - Trend Analysis

Toronto, Canada

Prosoft Associates Inc.

June 2022 - August 2022

- Implemented Python programming to analyze 100+ examples of Customer Service Cases and identify trends or patterns of coverage, SLAs and build algorithms for chatbots.

PROJECTS

Student Connections App | *React Native, PostgreSQL, Docker, Git*

December 2023 - Present

- Spearheaded creation of app to connect students with other peers within certain classes. Implemented use of Agile and SCRUM methodology to communicate and progress through the app efficiently.

UCSC Food Rating App | *React, Django, TSX, JS, MongoDB*

January 2024 - June 2024

- Created a UCSC dining hall website that implements popular social media aspects to dining hall meals so students can see and rate the foods they eat. Leveraged through MERN stack architecture.

UCSC Gym Crowd Tracker | *HTML, CSS, Bootstrap, OpenCV, YoloV8*

January 2024

- Utilized object detection through openCV and image classification through YoloV8 architecture to determine when people enter/exit a gym. Created a web app to display these results on github pages.

Car Feed Object Recognition | *Google Collab, YoloV8, OpenCV, Darknet-53*

January 2022

- Leveraged Haar Cascade Classifier based on the OpenCV API paired with YoloV8 and Darknet-53 architecture in order to perform image segmentation and object detection on roadside objects.

SKILLS

Machine Learning: NLP, RAG, LLMs, SciKit, Tensorflow, Logistic Regression, Backprop, Classifiers, CNNs

Full Stack: React, Node.js, TSX, Flask, MongoDB, Swift, Expo, Django, Angular, Bootstrap, VSCODE, SQL

Languages: Domo, Power BI, Python, C, Java, HTML, CSS, JS, TSX, PHP, Verilog, SQL, Bash, Powershell

DevOps & Cloud: Docker, Kubernetes, AWS, Azure, CI/CD, Jenkins, Terraform

EDUCATION

University of California Santa Cruz

GPA: 3.93

Bachelors of Science (B.S.) in Computer Engineering

Aug 2022 - June 2025

- Engineering Honor Society Officer, National Merit Scholar, Dean's Honors List(**x6**), Resident Assistant, Rocket Team Lead Software Developer

Hackathon 1st Place & 6th Place, Norcal Hacks & CruzHacks

Machine Learning Specialization, Deeplearning.ai

Judge Panel 1st Place Project, Inspirit AI