

Aksha Thakkar

akshathakkar@gmail.com •  Aksha Thakkar •  Aksha1812 •  Aksha Thakkar • +1(206)7797994

EDUCATION

Ira A. Fulton Schools of Engineering, Arizona State University

Master of Science in Computer Science, 3.69/4

Tempe, AZ

Aug 2021 – May 2023

Courses: Foundation of Algorithms, Deep Learning, Computing for Data-driven Optimization

Institute of Technology, Nirma University

Bachelor of Technology in Information Technology

Ahmedabad, India

Jun 2017 – May 2021

Courses: Database Management Systems, Object-Oriented Programming, Deep Learning, Cloud Computing

EXPERIENCE

Engineering Analyst, Goldman Sachs, Salt Lake City, UT

Jun 2023 – Present

- Driving the Liquidity Risk Analytics and Reporting team to improve and monitor holistic liquidity risk measures reported to the Federal Reserve Bank and EMEA entities on LCR, NSFR and other key regulatory metrics for Commitment and Loan products.
- Establishing automated reporting methodologies using Python, Slang, Tableau, SQL to alleviate manual effort and actively engaging in attribution and analysis of large sets of data to ensure risk management.

Software Engineering Intern, Fovus, Tempe, AZ

Oct 2022 – Jan 2023

- Architected a Serverless Architecture application to execute High Performance Computing jobs using AWS Parallel cluster, AWS Lambda, EC2, S3, DynamoDB Route53 and maintained its reliability during periods of massive dynamic scale.
- Worked on providing multi-cloud support using Azure Cyclecloud, Batch using Terraform.
- Reduced the average response time by 40% through Automation of Deployment activities using AWS CDK, Cloud formation.

Engineering Summer Analyst, Goldman Sachs, Salt Lake City, UT

Jun 2022 – Aug 2022

- Enhanced a web application keeping track of Liquidity Assets by delivering RESTful web services with Java Spring Boot, Maven and DB2 SQL to achieve increased customization views for users leading to rise in user engagement by 7%.
- Integrated calendar Plex APIs with Slang and Python to annotate daily projections for the Corporate Treasury team.
- Refined the UI using ReactJS, JSX, HTML and CSS. Tested features using Cypress framework achieving 80%+ code coverage.

Research Aide, Thunderbird School of Management, ASU, Tempe, AZ

Jan 2022 – May 2022

- Contributed to research examining changes in Marketing and Consumer behavior during the COVID-19 pandemic by building regression models and visualization dashboards using Python, Tableau, SPSS and SAS.
- Coached more than 250 students and designed coursework, assignments and quizzes for TGM 557: Global Marketing and Data Analytics under the guidance of Dr. Preethika Sainam.

Data Science Intern, Jio Platforms Limited (JPL AI CoE), Bangalore, India (Remote)

Jan 2021 – Jun 2021

- Formulated binary and multi-class prediction models with Sklearn, OpenCV and evaluated them for sports (cricket) analytics.
- Applied XGBoost to increase the accuracy to 76%, used Pandas & Tableau for data visualization and PyCaret to deploy models.
- Delivered web modules for presenting telecom data using NodeJS, jQuery and MongoDB Database.

Software Development Intern, Pentaforce Printing Softwares, Mumbai, India (Remote)

May 2020 – Jul 2020

- Programmed a web application using PHP, MySQL, Bootstrap, HTML, CSS and used ChartJS to create data visualizations showcasing quality reports which record the efficiency and downtime for a cluster of machines.
- Incorporated Swing API for updating machine information and generating alerts.

SKILLS AND EXPERTISE

Languages: Java, Python, C/C++, JavaScript, Ruby, R, TypeScript, PHP, SQL, Julia, HTML, CSS, Slang, SPSS, SAS

Tools and Technologies: MySQL, TensorFlow, Keras, OpenCV, PyTorch, SciPy, NumPy, Pandas, Flair, NodeJS, Git, CDK, Sklearn, jQuery, ChartJS, Tableau, Hadoop, Hive, DB2, MongoDB, AWS, MapReduce, Gym, VueJS, REST, JSON, AJAX, Unix, Bootstrap, Flask, PyCaret, Flutter, ReactJS, Maven, Java Spring Boot, Plex, IntelliJ, JSX, Cypress, Swing, JUnit.

ACADEMIC PROJECTS

Stock Price Prediction based on Twitter Sentiment

Aug 2021 – Nov 2021

- Active contributor to the open-source project (Stonks_3.0) for Prediction of Stock Prices using Twitter Sentiment Analysis.
- Implemented Flair (DistilBERT) based Sentiment Analysis model on tweets extracted from Twitter API and stock prices from Yfinance. Illustrated data of AAPL, TSLA and MSFT stock prices and achieved a correlation coefficient of 0.91 on test data.

Automated Interface for Bomb Disposal Robot

Aug 2020 – Mar 2021

- Designed a full stack web application for controlling Raspberry Pi and deployed Reinforcement Learning models using Gym Toolkit, TensorFlow and Keras. Implemented Monte-Carlo methods and Actor Critic Methods and trained the simulated robotic environment of 2 degrees of freedom to reach its desired goal in less than 150 epochs.

Student Management System

Jan 2019 – May 2019

- Devised a student management system by making use of NodeJS, HTML, CSS, JavaScript, jQuery and AJAX.
- Delivered features to manage information of students like attendance, examination marks and administrative data and tested them using JUnit testing framework.

PUBLICATION

Author : “An online planning agent to optimize the policy of resource management”, International Conference of Computing Communication and Cyber Security (IC4S 2020) supported by Springer. DOI : 10.1007/978-981-16-0733-2_33