



EDUCATION

University of California, San Diego
Master of Science in Data Science

Expected Graduation: June 2025

National University of Sciences and Technology (NUST)
Bachelor of Electrical Engineering – CGPA: 3.99/4 – Rank 2nd

Sept 2015 – June 2020

EXPERIENCE

Data Scientist/Technical Delivery Consultant – Professional Services Team

Jan 2022 – Sept 2023

[Totogi, US](#)

Used: Python, Flask, GraphQL, AWS, Docker, Kubernetes

- Accelerated data migration by 30x by designing a Python ETL tool and migrated over 50 clients using it
- Deployed [Meta's open-source Magma Core](#) on AWS and integrated with Totogi OCS using Kubernetes, Terraform and Docker
- Saved the company USD 3M by upgrading a legacy software (C/C++) to newer kernel version with little supervision
- Facilitated demos and internal teams by designing, implementing, testing and documenting new tools and services
- Automated monitoring and testing of Totogi open-source API by creating custom Python tools
- Delivered challenging projects out of my comfort zone while learning new technologies (AWS, serverless, Flask, Docker)

Data Scientist – Artificial Intelligence (AI) Production

July 2020 – Jan 2022

[Afiniti, US](#)

Used: Python, R, MySQL, Statistical & Bayesian Modeling

- Increased revenue up to 4% for clients in different sectors (telecom, banking, etc.) through customer segmentation, churn and LTV prediction ensuring a personalized treatment to their customers in contact-centers
- Designed metrics custom to client's line-of-business to optimize revenue
- Ensured data integrity and fault detection via automation decreasing downtime by 80% and saving AI team's time by 30%
- Analyzed Terabytes of complex data to identify optimization opportunities and drive strategy
- Utilized statistical tests (A/B, power, hypothesis testing) for impact quantification with confidence intervals
- Assumed ownership of clients and projects by reviewing and approving data pipelines and models prior to deployment
- Collaborated with cross-functional teams to identify business issues and communicated complex analyses and insights

Research Intern – Processor Architecture Lab

June 2019 – Sept 2019

[EPFL, Switzerland](#)

Used: C++, Verilog, Python

- Alpha-tester for [Dynamatic](#), an open-source dynamically scheduled high-level synthesis tool
- Investigated the shortcomings of the tool and proposed workarounds after in-depth analyses and experimentation
- Worked with Lana Josipovic (Google Fellow, ETH Zurich) and Andrea Guerrieri on benchmarking and debugging the tool

Research Intern – Machine Learning and AI

June 2017 - June 2019

[TUKL-NUST Research and Development Center](#)

Used: Vivado HLS/C++, Python, Pytorch, Heterogeneous Comp.

- Developed open-source library to create custom hardware architecture achieving 3.36x speedup on PYNQ FPGA over Intel-i7
- Restructured algorithms to achieve Hardware-Software co-optimization
- Implemented the algorithm for binarization using integral image on FPGA

SKILLS

Certifications: AWS Cloud Practitioner, AWS Solutions Architect Associate | **Databases:** MySQL, Greenplum, Athena, GraphQL

Tools: Airflow, Machine Learning (Pytorch, Tensorflow, Keras, Scikit-Learn), Pandas, Numpy, Heterogeneous Comp.

ML Algorithms: Regression (Logistic, Polynomial, Ridge/Lasso), Classification (Logistic, XGBoost, Decision Tree, Random Forest, SVM), Clustering, Bagging, Boosting, Autoencoders, CNN, DNN, RNN, LSTM

Data Science Problems: Customer Segmentation, Churn Prediction, Uplift Modelling (incremental effect)

DevOps: Docker, Git, Kubernetes, Shell Script | **Other.** Communication, Leadership, Teamwork, Critical-thinking, Problem-solving

LEADERSHIP AND ACHIEVEMENTS

Afiniti

2020 – 2022

- Led a team of 8 professionals comprising of data scientists, analysts and engineers to deliver revenue gain of up to 4%.
- Created friendly and innovative environment in my team and personally coached struggling members

Summer@EPFL Internship Program (Acceptance Rate \approx 1%)

June 2019 – Sept 2019

CERN Openlab Internship Program – 2x (Acceptance Rate \approx 7.5%; Passed)

June 2019 – Sept 2019

US Dept. of State Global UGRAD Exchange Scholarship (Acceptance Rate \approx 2%)

Jan 2018 – May 2018

Merit Scholarship for all semesters (Top 3 in Batch)

2015 – 2020

Gold Medal – High School – National level Exam (1st among 12,000 students)

June 2015