

Shikhar Rastogi

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EDUCATION

NEW YORK UNIVERSITY

M.S. IN DATA SCIENCE

Sep 2022 - May 2024 | New York, USA

Introduction to Data Science

Probability and Statistics for DS

Optimization and Computational Linear Algebra

Big Data (expected)

Machine Learning (expected)

Probabilistic Time Series Analysis (expected)

Natural Language Processing with Representation Learning (expected)

BITS PILANI

B.E.(HONS) IN COMPUTER SCIENCE

M.Sc.(HONS) IN ECONOMICS

Aug 2015 - Aug 2020 | Goa, India

CGPA: 8.97 / 10.0

Neural Networks and Fuzzy Logic

Data Structures & Algorithms

Applied Econometrics

SKILLS

LANGUAGES

JAVA • Python • C++

TECHNOLOGIES

Spring Boot • MongoDB • Oracle SQL

PyTorch • Tensorflow • Pandas • Dask

PySpark • scikit-learn • Hive

CERTIFICATIONS

COURSERA

Deep Learning Specialization by deeplearning.ai

Natural Language Processing with Classification and Vector Spaces

EXTRA-CURRICULAR

Chief Coordinator at the Department of Publicity and Public Relations managing a 70 member team.

Trinity certified keyboardist and member of the Music Society of BITS Goa.

AWARDS

Excellent Performance Recognition Certificate at NTU

WORK EXPERIENCE

APPLE | SOFTWARE DEVELOPMENT ENGINEER

Jul 2020 – Jul 2022 | Hyderabad, India

- Deployed a model for multilingual hate speech detection to filter out hateful customer feedback, which achieved 90% accuracy in the real world using a fine tuned XLM-RoBERTa model
- Identified similar customer support queries using a fine tuned BERT based sentence transformer model to help advisors resolve customer issues quicker
- Developed resilient batch jobs using Spring Batch for the historical big data migration and update of close to 100 million records, with zero downtime reported
- Built fault-tolerant RESTful APIs using the Spring framework for systems handling close to 500 million service calls every day
- Won 2nd place in the Apple Worldwide Org Hackathon for developing a new product and coming up with unique business insights and metrics to add value

APPLE | DATA SCIENCE INTERN

Jul 2019 – Dec 2019 | Hyderabad, India

- Discussed the problem with business stakeholders to transform the business problem into an ML usecase and gathered requirements
- Performed extreme multi-label classification using Random Forests to populate fields in an internal application and reduced time taken in the flow by 20%
- Presented my work to the CIO of Apple and other VP level staff

RESEARCH EXPERIENCE

MULTIMODAL TURN TAKING SYSTEM FOR SOCIAL ROBOTS

Jan 2020 – Jun 2020 | Nanyang Technological University, Singapore

Under Prof. Nadia Thalmann via India-Connect at NTU Research Programme

- Used multimodal data to build an online continuous model to improve the flow in a conversation of a humanoid social robot
- Fused the prosodic speech and text features and fed them into a Bi-LSTM model with a custom attention mechanism to predict when the robot should speak up or interject

PROJECTS

ALPHABET RECOGNITION USING WIFI SIGNALS

Jan 2019 – May 2019 | BITS Pilani, Goa Campus

- Extracted data from interference in WiFi signals, and denoised and filtered using the 'signal' package on MATLAB
- Built a Siamese Network for One-Shot Learning with two identical convolutional neural networks to classify into different letters of the alphabet drawn in the air

MULTI-AGENT REINFORCEMENT LEARNING TO DEMONSTRATE COOPERATIVE HUNTING SCENARIOS IN ANIMALS

Aug 2018 – Dec 2018 | BITS Pilani, Goa Campus

- Set up a grid-world environment with multiple agents, with their respective actions and payoffs, and simulated the game using Multi-Agent Reinforcement Learning
- Trained the hunters using the Nash Q-Learning Reinforcement Learning algorithm and investigated when they cooperated or defected