Piyush Kathuria

Phone: +1 (857) 498 9956 | Email: pkath@bu.edu | GitHub: PiyKat | LinkedIn: Piyush Kathuria | Boston, USA

EDUCATION

Boston University, Graduate School of Arts & Sciences

Sep 2021 — Dec 2022

Master of Science in Computer Science

<u>Relevant Coursework</u>: Graduate Algorithms, Machine Learning, Object-Oriented Programming, Deep Learning, Natural Language Processing, Image & Video Computing

Jaypee Institute of Information Technology, Noida

July 2011 — June 2015

Bachelor of Technology in Computer Engineering

Relevant Coursework: Data Structures, Introduction to Algorithms, Operating Systems, Database Systems, Computer Architecture

SOFTWARE SKILLS

Languages Java, C++, Python

Tools Pytorch, TensorFlow, Git, PySpark, Pandas, Numpy, Scipy, Docker, PySpark

Database PostgreSQL, SQLite

EXPERIENCE

Iris Software, Noida, India | Senior Data Science Engineer

June 2018 — July 2021

- Developed the core algorithm using NumPy, SciPy, and SpaCy for a pdf parsing software to automatically extract natural language entities and tabular data from hedge fund reports, <u>automating 80% of the data creation & ingestion pipeline</u> for an investment bank.
- Implemented a data visualization web application that uses advanced data visualization techniques and time series forecasting to monitor & predict the movement of credit risk.
- Built a proof of concept Document Question Answering Engine with the goal of answering questions raised by users about the content of financial documents.

Untrodden Labs, New Delhi, India | Machine Learning Engineer

Feb 2017 — May 2018

- Designed the NLP pipeline for both the alpha as well as the production version for a chatbot product which <u>achieved 88% accuracy on</u> the task of classifying user queries and an F1 score of 0.84 on extracting entities from user queries.
- Led a team of 3 people to code up a proof of concept Facial Emotion Recognition Engine to classify human video snippets into 4 classes based on the paper: Facial Expression Recognition Using Enhanced Deep 3D Convolutional Neural Networks.

GlobalLogic, Gurugram, India | Analyst

Aug 2015 — Sep 2016

- Involved in the creation of the Google Developer Agency Program, with responsibilities including program ideation, documentation, and strategy.
- Advised the selected agencies regarding the adoption of Google Material Design Principles.

Defense Research & Development Organisation, New Delhi, India | Software Engineer Intern

May 2014 — July 2014

· Made a Java-based GUI application for devising military strategies and marking important strategic areas.

PROJECTS

Grammar Correction using Sequence-to-Sequence Models

GitHub Link

- Used grammatical perturbations on Cornell Movie Dialogue Corpus to create a custom dataset.
- A modified version of the decoding algorithm found in seq2seq models to restrict decoding to choose tokens from the input sequence or corrective token set.

Legends of Valor

• Designed the class structure using object-oriented programming principles, and was responsible for coding abstract base classes and child classes for monster and hero characters. Done as part of BU CS 611 Object-Oriented Programming.

Bank ATM System

• Designed the class structure for Accounts and Loans using object-oriented programming principles, and was responsible for database design and writing SQL queries. Done as part of BU CS 611 Object-Oriented Programming.