Pranav Goyanka

 $Boston, \, MA \mid 774\text{-}284\text{-}6311 \mid pgoyanka@gmail.com \mid linkedin.com/in/pranavgoyanka/ \mid github.com/pranavgoyanka/ \mid github.com/pranavgoyan$

EDUCATION

Boston University

Boston, MA

MS in Computer Science | GPA: 3.71/4.00

Sep 2023 - Dec 2024

Teaching Assistant: Graduate Distributed Systems (in Go)

Thapar Institute of Engineering and Technology

BE in Electronics and Communication Engineering | CGPA: 8.84/10.00

Experience

Patiala, India Jul 2017 – Jun 2021

Software Development Engineer

Oct 2022 - Jul 2023

Mobile Premier League

Bangalore, India

- Contributed to the Distributed Systems team and led the backend development for an upcoming application, playing a key role in the successful execution of the Go-To-Market plan.
- Achieved a 40% reduction in infrastructure costs and utilization by implementing a library for metrics collection and auto-scaling using OpenTelemetry, enabling graceful node shutdowns and adoption multiple cross-functional teams.
- Boosted user engagement and retention by 70% by expanding matchmaking systems with cross-country support, enabling seamless interactions across international user bases.
- Accelerated development and enhanced stability by designing backend systems and libraries with extensive end-to-end testing for Node.js-based microservice games, streamlining processes and eliminating boilerplate code across 7 games.
- Halved testing time for the Node.js team by using Kubernetes to run required non-Node.js services locally, enabling quick tests without full deployment.

Software Development Engineer

Jan 2021 - Oct 2022

Amadeus Software Labs

Bangalore, India

- Reduced chatbot development effort by over 50% by creating 'Chatbot as a Service,' a modular Java framework using Spring Boot, which integrated multiple NLP APIs and streamlined database interactions to accelerate bootstrapping.
- Pitched the solution to cross-functional teams, driving adoption by 3 teams and enabling efficient chatbot development.
- Reduced incidents by 40% by enhancing the stability, recovery mechanisms and regression tests of the C++ based backend the Back Office tool, to comply with the IATA NDC standards.
- Increased recovery efficiency by 80% by developing a Splunk dashboard to monitor incidents in real time.
- Fixed Oracle SQL database cron job scripts, enabling the automated periodic purging of 10+ TB of unwanted SQL data, significantly reducing database storage usage.

Student Developer

Jun 2020 - Aug 2020

Google Summer of Code

Remote

- Selected for GSoC as a part of the 18% applicants globally and contributed to the open-source project 'Social Street Smart', aimed at combatting misinformation and fake news.
- Generated and deployed serverless Machine Learning models, CI/CD pipelines, and APIs for fake news detection.
- Reduced model size of TensorFlow machine learning models by 85% and hosted them on AWS Lambda.

TECHNICAL SKILLS

Programming Languages: C++, Python, Java, Go, TypeScript, JavaScript, SQL, HTML/CSS **Frameworks**: Docker, Kubernetes, Node.js, PostgreSQL, gRPC, Flask, PyTorch, TensorFlow

Tools & Libraries: AWS, RESTful API, Spring, Apache Flink, Kafka, Redis, Git, Linux

Other Skills: Event Driven Architecture, System Design, Object Oriented Programming, Agile Development, Scrum

PROJECTS

Retrieval-Augmented Generation for Internal Documentation Z | RAG, LLMs

Aug 2024

- Developed a RAG pipeline that optimises LLM responses based on proprietary documentation.
- Implemented a user-friendly web UI using Flask for uploading documentation and interacting with the model.

Automated Trading System & | LSTM, TensorFlow, scikit-learn

Apr 2024

• Developed LSTM models to predict daily temperatures for four cities using multi-source weather data, leveraging predictions to execute automated trades on the Kalshi exchange and prediction market.

Operator Placement on the Edge in Apache Flink & | Flink, Edge Compute, Streaming

Apr 2024

• Enhanced Apache Flink with heterogeneous device support and dynamic task offloading to edge nodes, enabling efficient edge computing for geo-distributed queries while minimizing latency.

Fault Tolerant Key-Value Store | Distributed Systems, Raft Consensus Algorithm, Go

Nov 2023

• Built a scalable key-value storage service by implementing the Raft distributed consensus algorithm in Go.