Geet Rajendra Patel

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Education

MS, Computer Science — *May 2024 (Expected)*
Rutgers University — *New Brunswick, NJ*

B.Tech, Information and Communication Technology — *May 2020*
Dhirubhai Ambani Institute of Information and Communication Technology — *Gandhinagar, India*

Courses: GPU Programming, Artificial Intelligence, Mathematical Foundations of Data Science, Machine Learning, Natural Language Processing, Design of Internet Services

Skills

Programming Languages	C, C++, Java, Python, SQL, Bash Scripts
Libraries and Frameworks	Spring, Hibernate, Numpy, Matplotlib, OpenCV, PyTorch, Cuda
Databases/Storages	MySQL, PostgreSQL, Kafka, Redis, Elasticsearch
Tools and Technologies	Linux, Git, Visual Studio Code, Eclipse, IntelliJ, PyCharm, Jupyter

Experience

Software Engineer — *Jan 2020 - July 2022*
Rapidbox, an online Fashion E-Commerce Platform — *Bangalore, India*

- Successfully cleared customer support case backlogs and improved customer support interfaces by maintaining ongoing communication with the operations team.
- Consistently delivered production-ready software within tight timelines of less than a day, enabling prompt resolution of customer issues.
- Boosted daily order volume by over 2000 by seamlessly integrating multiple marketplace platforms with the in-house order management and delivery system.
- Designed and implemented an event-driven, asynchronous data transfer pipeline using Kafka and Logback for marketing analytics on one million+ daily user actions.
- Automated daily backend tasks, utilizing database views and indexes, and cronjobs to deliver internal reports to operations and marketing teams.

Academic Projects

Fast Trajectory Replanning using A* Search — *Sept 2022*
Developed and utilized Repeated Forward A*, a variant of general A* search, to simulate a realistic scenario of a robot navigating through an unknown environment with limited information of its current location and target.

Inverse Kinematics and Machine Learning for Humanoid Robotics — *Aug 2019 - Dec 2019*
Developed a cost-effective, efficient, and dependable motion tracking system using image processing. The generated data is now utilized for inverse kinematics modeling, Robot Operating System, and LSTM training.

Peer-reviewed Publications

[1] **G. Patel**, Roshani, T. Garg, S. Patel, T. K. Maiti and B. Chaudhury, "Inverse Kinematics Based Computational Framework for Robot Manipulation Inspired by Human Movements," in *Proceedings of the Sixth International Conference on Mathematics and Computing*, 2021.

[2] S. Patel, T. Garg, **G. Patel**, Roshani, B. Chaudhury and T. K. Maiti, "Motion Retargeting and Machine Learning for Humanoid Robotics," in *2020 International Symposium on Devices, Circuits and Systems (ISDCS)*, 2020.