Abhishek Singh

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Software Engineer

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EDUCATION

Carnegie Mellon University, Pittsburgh   **May 2023**
Master of Information Systems Management   GPA: 4.0
Object Oriented Programming | Database Management Systems | Introduction to Machine Learning

Manipal Institute of Technology, India   **July 2018**
Bachelor of Technology in Computer Science and Engineering   GPA: 3.75
Data Structures | Design and Analysis of Algorithms | Operating Systems | Distributed Systems

SKILLS

Functional	Distributed Systems, Design Patterns, Database Management, DevOps, Full-stack Web Development
Languages	Java, Python, C++, Rust, Javascript, SQL, LaTeX
Frameworks	Spring Boot, Flask, Angular, ROS
Tools	Git, AWS, Pandas, Numpy, Scikit-learn, PyTorch, Docker, Jenkins

TECHNICAL EXPERIENCE

RESEARCH ASSISTANT and SYSTEM ARCHITECT | Rethinking Automation in Construction (ReAC)   **June 2022 — Present**
Carnegie Mellon University   *Pittsburgh, PA*

- Under Prof. Daniel Cordoso Llach (School of Architecture) and Prof. Jean Oh (Robotics Institute).
- Designing system architecture for a ROS-based navigation stack using Deep Reinforcement Learning for local path planning.
- Developing communication mechanism between a Husky's input (3D-Lidar) and the RL modules via ROS-messages.
- Customizing a local path planner using and testing API-completeness for SLAM, PDT and Deep RL.

SENIOR SOFTWARE DEVELOPMENT ENGINEER | Data Control Tower (DCT)   **Nov 2021 — May 2022**
Delphix   *Remote*

- Built a high-scale, multi-cloud central management platform to aggregate virtual databases to perform CRUD operations.
- Designed scalable solutions to enable API-driven DevOps workflows and manage the data estate for all Delphix customers.
- Authored multiple REST-based endpoints for product functionality using a "design-first" approach to API development.
- Containerized microservices and automated code generation and dependency installation to improve application launch time by 90%.

SOFTWARE ENGINEER | Air Canada Competency Center (AC-PSS)   **July 2018 — May 2021**
Amadeus Software Labs   *Bangalore, India*

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- Aliquam at urna congue dolor luctus sodales.
- Quisque vitae tortor at elit tincidunt molestie sed ac quam.

ACTIVITIES

Graduate Student Council Representative	YYYY — YYYY
Academic Student Association: Some Workshop, Creator/Facilitator	Fall YYYY
City Symposium Series, University of Motherland, Poster Presenter	Fall YYYY
College of Science and Engineering Student Project Showcase, Research Presenter	Spring YYYY
Graduate Research and Creative Works Showcase, State University, Research Presenter	Spring YYYY
Some Coding Sprint, University of Some Other State	Spring YYYY