

Manisha Goyal

manisha.goyal@nyu.edu | +1 (929) 695-7468 | New York, NY

Website: manishagoyal.vercel.app | Github: [manisha-goyal](https://github.com/manisha-goyal) | LinkedIn: [goyalmanisha](https://www.linkedin.com/in/goyalmanisha)

EDUCATION

New York University (NYU)

Masters in Computer Science

New York, NY

Sep 2023 – May 2025 (expected)

- Courant Institute of Mathematical Sciences, GPA: 4.0/4.0
- *Coursework*: Fundamental Algorithms, Operating Systems, Programming Language, Data Science, Artificial Intelligence

Singapore Management University (SMU)

Bachelor of Science in Information Systems Management

Singapore

Aug 2014 – Apr 2018

- Double Major in Information Systems and Analytics (Advanced Technology)
- *Coursework*: Software Engineering, Object Oriented Application Development, Computational Thinking, Data Mining

University of Mannheim

Exchange Semester, School of Business Informatics & Mathematics

Mannheim, Germany

Aug 2017 – Dec 2017

- *Coursework*: Large-Scale Data Management, Text Analytics, German Language

SKILLS

Languages: Java, Scala, Python, C, C++, Solidity, SQL

Web Technologies: Node.js, JavaScript, HTML, CSS

Libraries: Scikit-Learn, NumPy, Pandas, Matplotlib

Frameworks: SpringBoot, Flask, React, JUnit, Pytest, Behave

Cloud: OpenShift, Kubernetes, GCP, AWS

Databases: MySQL, PostgreSQL, Oracle

Methodologies: Agile/Scrum, DevOps, Design Thinking

Dev Tools: Git, GitHub, Docker, Jenkins, Postman, Jira, Zenhub

Others: Linux, REST API, OpenAPI, Swagger, Apache (Kafka, Hadoop, Spark), Tableau, Quorum, Ethereum, Web3.js

EXPERIENCE

J.P. Morgan Chase

Software Engineer (Associate), Onyx by J.P. Morgan

Singapore

May 2020 – June 2023

- Developed decentralized application from the ground up (*Java, Web3.js, REST APIs, Docker, Kubernetes*) for JPM Coin System, a first-of-its-kind permissioned blockchain network that allows near-instant cross-border liquidity funding for institutional clients
- Led development and live deployment of blockchain ledger (*Smart Contracts, Solidity*) for Partior, an inter-bank blockchain network enabling multi-currency atomic settlements across major global banks in under 2 minutes
- Built proof-of-concept (*Solidity Diamond Standard*) to make Partior's blockchain ledger scalable and upgradable, contributing to successful transaction of tokenized Singapore government securities on the Polygon network

J.P. Morgan Chase

Software Engineer (Analyst), Cybersecurity

Singapore

Aug 2018 – Apr 2020

- Developed Cybersecurity Data Lake (*Apache Hadoop, Apache Kafka, SQL, Linux, Docker*), enhancing the firm's real-time cybersecurity incident monitoring capabilities by 75% and reducing incident response times by 30%
- As Global Application Owner, led deployment and production management of JPMC Cybersecurity Log Collector, enabling real-time processing of syslog messages across 200+ global systems with 99.9% uptime, enhancing security for critical operations

J.P. Morgan Chase

Software Engineer Intern, Cybersecurity

Singapore

May 2017 – July 2017

- Built an automation tool (*Java, SpringBoot*) to parse and analyze static security scanning results, boosting efficiency in the firm's application security assessments by over 90% and reducing the evaluation times by 80%

Li Ka Shing Library

Data Analyst Intern

Singapore

Nov 2016 – April 2017

- Conducted data mining and visual reporting on library usage patterns (*SQL, SAS, Tableau*), leading to a 15% improvement in resource allocation efficiency and a 10% increase in student engagement with library services

Fujitsu-SMU Urban Computing and Engineering Lab

Software Engineering Intern

Singapore

Apr 2016 – Jul 2016

- Researched data-driven optimization techniques for maritime-port-urban logistics, and developed an e-Market Platform application (*Java, SpringBoot, SQL*) that reduced operational costs by 20% and increased logistical efficiency by 40%

PROJECTS

House Value Prediction | Python, Scikit-learn, XGBoost, Pandas, Matplotlib, SHAP values

May 2024

- Developed a machine learning model using XGBoost and other techniques to predict residential property prices in Ames, Iowa, achieving an R² score of 0.918; provided actionable insights for real estate stakeholders to optimize investment strategies

Dice Game Simulation | Python, Q-Learning, Reinforcement Learning

May 2024

- Developed a dice game simulation utilizing Q-Learning to optimize dice-rolling strategies, dynamically adjusting decisions based on game state and past outcomes to maximize rewards; implemented features such as customizable game settings

Unix Shell Implementation | C, Unix, Shell Scripting, Operating Systems

Feb 2024

- Designed and developed a simplified Unix shell in C, incorporating functionalities like basic command execution, input/output redirection, pipe-based inter-process communication, and job control for process management