# Mohammad Bayat

Phone: 917-434-3777 | Email: mbny30@gmail.com | LinkedIn: BayatTheAnalyst | GitHub:/mpaydar

## Objective

A dedicated graduate student pursuing a master's in computer science at New Jersey Institute of Technology, skilled in data analytics, machine learning, and full stack development, actively seeking software development internship opportunities.

## Education

- **Computer Science M.S** | New Jersey of Technology | Jan 2024-present
- **Computer Science M.S** | Rochester Institute of Technology | August 2023-Dec 2023
- **Computer Science B.A |** Queens College | August 2020- Dec 2022

## Skill

- **Programming Languages:** Python, Java, C++, JavaScript
- **Frontend Frameworks:** ReactJS**,** AngularJS, Vue.js CSS, HTML, Tailwind
- **Backend Frameworks:** TypeScript, Node.js, Django
- **Database Skills and Technologies:** DuckDB, PostgreSQL, SQLite, Firebase, MySQL, SQL Server, SQL
- **Data Analytics Technologies:** Pandas, Numpy, Scikit-learn, Seaborn, Matplotlib, Microsoft Excel
- **Version Control:** Git, GitHub
- **Cloud Technologies:** AWS, Microsoft Azure| Relevant Certification: AWS Cloud Practitioner |Issued: 2021

## Experience

**Full Stack Developer Intern |** DIYVERSITY | Remote | 09/2022 - 10/2022 | **Technologies**: ReactJS, CSS, HTML, Firebase

- Collaborated with the frontend team on the development of a Google Chrome Extension and optimized menu bar navigation using ReactJS, CSS, and HTML.
- Implemented backend connectivity via Firebase for user authentication and managed onboarding processes for new interns.
- Authored and standardized documentation, ensuring streamlined operational processes for the team.

## Projects

**Dynamic Library Reservation and Management System**

- Led the design of a new database, building an efficient ER model and integrating team feedback to optimize structure and function.
- Automated database setup for 21 tables using Python, enhancing team productivity and data management efficiency.
- Boosted database reliability by implementing SQL assertions and row-level triggers to enforce data integrity and consistency.
- Engineered dynamic SQL tables and managed HTTP data retrieval operations, streamlining data integration into the SQLite database.
- Developed a Django server to process transactions including borrowing and reserving, and to fetch document statistics by titles or ISBNs.
- Utilized SQLiteStudio to connect to the database and monitor client interactions from frontend to backend, ensuring a graphical user interface that enhanced team productivity

**NYC Transportation Data Web Application**

- Led a collaborative effort with a team of 5 members to conduct thorough background research, identifying key gaps and opportunities in existing research for the project's success.
- Designed and implemented a robust DuckDB Schema, optimizing data storage and management capabilities to efficiently handle a sizable 64 GB dataset sourced from the NYC Taxi Commission.
- Improved the data scraping script to empower users with the ability to select specific data segments for download, significantly enhancing data retrieval efficiency and user experience.
- Leveraged the DuckDB API to craft advanced SQL queries, facilitating in-query data analysis directly within Python files, streamlining data exploration and insights generation.
- Implemented the Pickle module for the storage and sharing of data analysis results, enabling seamless collaboration with fellow team members working on the front-end development of the web application.