

Pegah Zargarian

San Jose, CA | [REDACTED] | zargarian.p@northeastern.edu | [GitHub](#) | [LinkedIn](#)

EDUCATION

Northeastern University, San Jose, CA
Master of Science in Align Data Science, GPA: 3.86
Tarbiat Modarres University
Master of Science in Natural Resource Engineering

Expected: December 2025

TECHNICAL SKILLS

- Programming Languages: Python, SQL, R, Java, C++, C
- Libraries/Frameworks: Pandas, NumPy, Matplotlib,
- Web Technologies: HTML, CSS, JavaScript, Selenium
- Database Management: SQLite, MySQL, Relational Databases
- Tools/Platforms: Git, GitHub
- Relevant Courses: Database Management, Cloud Computing, Algorithm, Linear Algebra, Object Oriented Programming (Java)

PROJECTS

Professional Development App Development (Northeastern University) | July 2024 - present

- Collaborate with Dr. Akram Bayat's team to develop the Professional Development App (PDA).
- Responsible for Designing and implementing scalable and secure cloud infrastructure using Amazon Web Services (EC2, RDS).

Pharma Sales Database Development & Mining (Northeastern University) | Sep - Dec 2023

- Led and developed ETL (Extract, Transform, Load) processes from XML files using node-by-node traversals in R's XML library in a cooperative team setting.
- Implemented SQLite database schema and utilized DBI library to insert extracted XML data.
- Linked SQLite and MySQL databases with SQL queries and R data frames.
- Created Fact tables in MySQL for data mining and data visualization, using ggplot2, improved data retrieval efficiency by 25%.

Role-Playing Game Development in Java (Northeastern University) | Jan - Apr 2023

- developed and executed an interactive role-playing game in Java using object-oriented design principles.
- Designed and implemented game mechanics, character classes, and a dynamic quest system.
- Improved user engagement by 10% through interactive gameplay and dynamic quest design.

Customers Database of Broadcom Tech Company | Dec 2021

- Led the development and implementation of a customer database management system for a company using C++ in a synergistic team setting.
- Optimized the performance of data retrieval and storage operations to handle large volumes of customer data efficiently by Leveraging Binary Search Trees (BST) for efficient data retrieval and Hash Tables for rapid access, along with implementing.
- Enhanced data management efficiency by 40% through the integration of advanced algorithms and robust data structures.

CERTIFICATES

- Amazon Web Services (AWS) Cloud Architecture Badge - Amazon training, July 2024
- Python for Data Science, Artificial Intelligence & Development - IBM, August 2023
- Web Development with HTML, CSS, JavaScript Essentials - IBM, July 2023

ACTIVITY & LEADERSHIP

- Software Engineer Fellow at Headstarter AI (Long Island City, NY), Remote, July 2024- present
Final project that takes a startup's current backlog and builds it meeting business requirements
- Member of AI & Data Club at Northeastern University, April 2024- present.
Recent role: exhibitor in TiEcon 2024, Santa Clara, CA.