

# Michael Goldfarb

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[in linkedin](#) | [website](#) | [github](#)

## EDUCATION

### Bachelor of Science with Honors, Computer Science & Business

Aug. 2021 - May 2025

Lehigh University – GPA: 3.70

Bethlehem, PA

**Relevant Coursework** Software Engineering, Database Systems, Programming & Data Structures, Systems Software

## SKILLS

**Languages** Expert: Java, Python, HTML, CSS, JavaScript, SQL | Proficient: Swift, Rust, C++ | Familiar: Go, Solidity, C

**Technologies** React JS, Spring Boot, Postman, Pandas, NumPy, PostgreSQL, MongoDB, Docker, Bash, AWS, Git, Linux

**Clubs** Lehigh Coders Community (Professional Dev. Chair), Blockchain Club, AEPI (Treasurer, Academic Chair)

## EXPERIENCE

### Outlier

Jun. 2024 - Present

AI Consultant

Remote

- Train and fine-tune a generative AI model for the Bulba project using RLFH, enhancing response accuracy by 30%.
- Create and refine AI prompts, optimizing them for high-quality outputs and reducing response errors.
- Evaluate tools and monitor model decisions by analyzing JSON code, ensuring precise AI-generated content.

### Oracle

Jan. 2024 - Present

Software Engineer (Capstone)

Bethlehem, PA

- Improve transaction speed by 25% for ECB digital euro by adjusting Oracle DB using PL/SQL, REST APIs, and VBCS.
- Lead database sharding implementation, enhancing scalability and performance by 40% for high-volume data.
- Conduct database stress and benchmark tests using Artillery, identifying and resolving performance bottlenecks.

### A.I.M.S Lab Mount Sinai Hospital

Jan. 2024 - Present

Machine Learning Intern

New York, NY

- Engineer multimodal models linking genetic, clinical, and social data, boosting disease prediction accuracy by 20%.
- Deploy advanced augmented intelligence models, boosting patient outcomes by 15% using deep learning algorithms.
- Create generalized disease prediction initiatives, ensuring early interventions and overall improved patient outcomes.

### Lehigh Blockchain

Aug. 2023 - Present

Undergraduate Research Fellow

Bethlehem, PA

- Develop a Stellar-like hierarchical consensus mechanism to model a global cross-CBDC payment solution.
- Create a pseudo verkle tree in Rust with Marlin and ark\_works libraries, improving cryptographic efficiency by 25%.
- Improve proof verification success by 20% by creating polynomial commitments and trie insertion methods.

### STEM-SI

May 2023 - Aug. 2023

Software Engineer Intern

Bethlehem, PA

- Trained models on historical CDC data, achieving 85% prediction accuracy in future influenza cases.
- Designed powerful data visualizations in Python to provide actionable insights into mitigating influenza spread.

## PROJECTS

### OhConnections [🔗](#) [🌐](#) | HTML, CSS, React JS

Mar. 2024 - Present

Creator and Developer

New York, NY

- Create MLB version of New York Times' Connections, achieving over 1,000 active users within the first month of launch.
- Develop logic and state management for real-time user interactions, including user input handling and animations.
- Seamlessly integrate a user-friendly interface with visual MLB player groupings, increasing user retention by 25%.

### MLB Game Predictor [🔗](#) [🌐](#) | Python, Pandas, NumPy, Spring Boot, React JS, PostgreSQL, AWS

May 2023 - Present

Creator and Developer

New York, NY

- Use machine learning to predict winner of MLB game; Scrape MLB Stats API to get stats from 2,430 past/current games.
- Develop linear regression & random forest models to predict winners; Clean & filter 20+ datasets using NumPy/Pandas.
- Create companion website with game predictions and prediction accuracy by team, attracting 500+ visitors monthly.

### Mountain Hawk Food Finder [🌐](#) | Swift, Spring Boot, Python, Firebase

Jun. 2023 - Oct. 2023

Creator and Developer

New York, NY

- Developed a visually-appealing full stack iOS app for Lehigh dining, enabling easy navigation between dining options.
- Implemented backend code to store user information, item ratings (average/given), business hours, and daily menus.
- Designed and optimized app frontend to allow user to view eateries on Apple Maps and easily find dining options.