Michael Goldfarb

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in linkedin | website | qithub

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, CI/CD, 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 a generative AI model to enhance its ability to generate complex and specific coding solutions through RLFH.
- Fine-tune generative text responses from LLMs to produce high-quality and precise programming solutions.
- Develop sophisticated AI prompts to improve the model's performance in solving coding problems in Python and SQL.

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 versus OpenCDBC; developing mobile wallet app & monitoring GUI.

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

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

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.