Benjamin Lerner

Huntington Woods, MI 48070
+1 248-996-3164 lernerbe@umich.edu LinkedIn github.com/lernerbe

Passionate about leveraging data engineering, software development, and machine learning to solve complex problems. Proficient in Python, SQL syntax, and C++, with hands-on experience in data modeling, optimizing systems for performance, and object-oriented programming.

Education

University of Michigan **Expected - May 2026**
Bachelor of Science in Computer Science *Ann Arbor, MI*
Bachelor of Arts in Spanish

Relevant Coursework: Programming and Data Structures, Advanced Data Structures and Algorithms, Computer Organization, Computer Science Theory, Database Management, Computer Security, Intro to Statistics

Skills

Languages: Python, SQL, C/C++, R, HTML/CSS (beginner), Flutter
Tools: Pandas, React.js, FastAPI, AWS, Spark, Airflow, MySQL, PSQL, SQL*Plus, BigQuery (beginner), Linux, Git, VSCode
Others: Spanish (fluent), OOP, MPP Databases, problem-solving, teamwork, communication, high-standards

Experience

Comcast **May 2025 – August 2025**
Incoming Data Engineer Intern *Denver, CO*

Decido **May 2024 – July 2024**
Data Engineer Intern *Tel Aviv, Israel*

- Leverage Pandas and NumPy for efficient data handling, transformation, and analysis, while employing OAuth 2.0 for secure authentication and authorization processes
- Database Management with SQL: Managed and manipulated databases on PostgreSQL and BigQuery.
- Built API endpoints for managing company accounts and pages with FastAPI, and worked closely with the DevOps team to deploy applications on AWS EKS (Elastic Kubernetes Service) for scalable and efficient container management.
- Demonstrated test-driven development utilizing Swagger to test API endpoints, ensuring accurate functionality and smooth integration with fronted systems.

Society of Hispanic Professional Engineers **September 2022 – Present**
Mentor *Ann Arbor, MI*

- Led STEM outreach initiatives to foster diversity and promote education within underrepresented communities.
- Mentored aspiring engineers with weekly meetings.
- Expanded and applied networking skills through interactive seminars.

Projects

Natural Language Processing for Post Subject Identification | *C++* **June 2023**

- Collaborated with a team to engineer a system that automatically classifies the subject of Piazza posts using natural language processing and machine learning techniques.
- Designed function objects, recursion, binary trees, templates, comparators, and map data structures, reinforcing knowledge of container ADTs, dynamic memory, and linked lists.

Fakebook JDBC: Database Query Optimization | *Java, Oracle SQL* **February 2025**

- Collaborated in a team to develop and optimize Oracle SQL queries for a Java-based database application.
- Integrated queries with Java using JDBC, processing and structuring data efficiently.
- Debugged and refined queries in SQL*Plus, ensuring accuracy and performance.

Custom Database Query Language with Hash Table Management | *C++, SQL* **February 2023**

- Demonstrated expertise in hash tables and large data structures in C++ and SQL.
- Programmed a database management system for handling various operations, including table creation, data insertion, deletion, and querying, utilizing custom hash tables and binary search trees for efficient indexing and retrieval.

Drone Delivery Optimization using Algorithms | *Python, C++* **April 2022**

- Developed optimization algorithms, including Traveling Salesperson and Knapsack, to enhance efficiency in drone delivery logistics.
- Built and tested these algorithms in Python, resulting in optimized route planning and resource allocation.