Simon Lunay

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EDUCATION

The Ohio State University, College of Engineering — Columbus, Ohio
Bachelor of Computer Science and Engineering — Expected May 2027
- Dean's List (all semesters), Trustees Scholarship — GPA: 3.8
- Member of Code4Community, AI Club
- Relevant Coursework: Linear Algebra, Calculus 1 and 2, Engineering Stats, Fundamentals of Engineering 1 and 2, Fundamentals of Higher Math, Data Structures and Algorithms 1 and 2

WORK EXPERIENCE

Research Software Engineer — **September 2025 - Present**
Pease Lab @ Ohio State University — Columbus, Ohio

- Condensing **500M+** datapoint MySQL database into binary string encodings for storage and query efficiency, reducing query execution times by **35-40%** with fellow researchers and engineers
- Reducing page load times by **20%** for end-users by optimizing **PHP** database queries for a **full-stack** web application displaying genomic and georeferenced accession data (**HTML/CSS/JavaScript** frontend)

Software Engineering Intern — **May 2024-August 2024, May 2025-August 2025**
JCL Equipment Co. — Xenia, Ohio

- Maintained and optimized **SQL** queries, improving data retrieval performance by **30%**
- Developed a **Python** script to manage sales data and automate daily logging of transactions
- Integrated **RESTful APIs** and caching mechanisms, improving system efficiency by **20%** and reducing latency

Certified Trainer — **January 2022– August 2023**
Chipotle Mexican Grill — Beavercreek, Ohio

- Trained new hires in any position and supplied them with the tools to become successful employees
- Facilitated onboarding and training for 15+ new hires, improving **team productivity** and retention

PROJECTS

FitAI | *React, Gemini API, SQL, TensorFlow, JavaScript* — **October 2025 – December 2025**

- Developed a **full-stack** fitness web app with a **React** frontend targeting university-specific workout plans and dietary suggestions, with an expected result of **1.5-2.5 million** students starting in the gym
- Generated **user-personalized** fitness plans through a **TensorFlow.js** body scan analyzing body-pose landmarks, joint angles/alignment, and body proportions/symmetry to estimate user's body metrics with a **5% margin of error**
- Engineered a **health-oriented chatbot** powered by **Gemini's API**, leveraging a **Supabase-hosted PostgreSQL database** to provide tailored responses using **10+** campus-based data tables

JCL Equipment Website | *HTML/CSS, JavaScript, Node.js, SQL* — **May 2025 – June 2025**

- Built a full-stack website for a local business to give the company a more professional online presence
- Drove a **40% increase** in customer engagement through a revamped, user-friendly design
- Developed **30+ pages** using **HTML, CSS,** and **JavaScript** frontend with a **Node.js** backend, integrated with a **SQL** database that enables the business owner to update the Used Parts for Sale page independently

AI Stat/Fantasy Predictor | *React, AI/Scikit-learn, Express, Python* — **June 2025 – August 2025**

- Built an **AI** stat predictor using **Python** and **Scikit-learn** for machine learning and an **Express backend** API
- Featuring a dynamic **React frontend**, delivering a smooth and interactive user experience with fast searching
- Achieved a **10% margin of error** with the predictor by training a Scikit-learn regression model
- Enabled **20+** fantasy league members to make more informed drafting decisions

SKILLS

Languages | Python, JavaScript, Java, C/C++, SQL, HTML/CSS, Assembly
Frameworks and Tools | React, Node.js, Express.js, GitHub, ML Libraries, VS Code, RESTful API, Scikit-learn, Gemini API