

LUKE THILGEN

[GitHub](#) · [Portfolio](#) · [LinkedIn](#) · [Email](#)

SKILLS

- **Languages:** Python, Java, JavaScript/TypeScript, SQL
- **Backend & APIs:** Node.js, Express, REST APIs
- **Frontend/UI:** React, Dash, Plotly, HTML/CSS
- **Databases:** MySQL, PostgreSQL, MongoDB
- **Tools:** Git/GitHub, Linux, GitHub Actions, Docker, Postman, pytest, OpenAI API, Hugging Face Spaces
- **Focus:** Backend APIs, data processing, interactive visualization, testing/CI

EXPERIENCE

StudentConnect — Back-End Lead (Team Project) · Jan 2024 – May 2024

- Designed and shipped REST APIs (Node.js/Express) for core platform features.
- Integrated MongoDB and streamlined request handling to reduce latency and errors.
- Partnered with front-end to align endpoints; added basic usage analytics/logging and a Postman collection.

PROJECTS

StudentConnect-solo — REST API for Student Management · Node.js, Express, MongoDB · 2025

- Built a **CRUD REST API** with consistent JSON responses, validation, and structured error handling.
- Implemented **ID and schema validation** with proper HTTP status codes (400/404/422/500).
- Designed clean separation of concerns (**routes, controllers, models**) for maintainability.
- Tested and documented endpoints using **Postman**.
- Repo: [StudentConnect-solo](#)

NeuroLearn — Interactive 3D neuroanatomy · Python, Dash/Plotly, Trimesh · Nov 2024 – Nov 2025

- Built a clickable **3D brain** with region metadata and **AI Q&A**; added **session chat memory** and **per-IP rate limiting** to keep usage safe.
- Deployed a **live demo on Hugging Face Spaces** with environment-based config; added input clamping and daily global call caps.
- Repo: [NeuroLearn](#), Demo: [Live Demo](#)

EDUCATION

B.S., Computer Science — San Francisco State University, Dec 2024