

# Jacob Langlois

724-470-3313 | [23langloisj@gmail.com](mailto:23langloisj@gmail.com) | [linkedin.com/in/jacob-langlois](https://linkedin.com/in/jacob-langlois) | [github.com/23langloisj](https://github.com/23langloisj)

## EDUCATION

### Northeastern University

Sep 2023 - May 2027

*Honors Candidate for Bachelor of Science in Computer Science and Mathematics*

*GPA: 3.97/4.0*

Coursework: Object Oriented Design, Discrete Structures, Mathematics of Data Models, Linear Algebra

Awards & Activities: Honors Program, Dean's List, Alpha Kappa Psi, Sandbox, Rock Climbing, Golf

## TECHNICAL SKILLS

**Languages:** Java, TypeScript, JavaScript, Python, Ruby, SQL, HTML/CSS, C#

**Frameworks & Libraries:** React, Ruby on Rails, Node.js, Express.js, Tailwind, .NET, NumPy, Pandas, JUnit, Flask

**Developer Tools:** Git/GitHub, Linux, Docker, AWS, Terraform, PostgreSQL, Jupyter, Postman, VSCode, IntelliJ

## EXPERIENCE

### Technical Lead & Head of DevOps

Aug 2024 – Present

*Sandbox at Northeastern*

*Boston, MA*

- Spearhead technical direction and development for GraduateNU, a degree audit platform serving 500+ students, by guiding architectural decisions, reviewing code, supporting developers, and ensuring platform stability
- Lead DevOps across GraduateNU and SearchNEU, managing AWS infrastructure, Terraform configs, and PostgreSQL upgrades while resolving production issues and collaborating on long-term infrastructure planning

### Software Engineer Co-op

Jan 2025 – Jun 2025

*Smartleaf Inc.*

*Boston, MA*

- Developed core Advisor Portal features using Ruby on Rails, PostgreSQL, Stimulus, and JavaScript in a Scrum-based Agile environment, building simple UIs and robust backend logic with full Jest test coverage
- Owned key functionality within the Invest Cash epic, enabling bulk investment requests that replaced over 150 custom message requests—automating advisor workflows, improving efficiency, and reducing turnaround time
- Worked cross-functionally with product managers and QA to deliver features like Household Prospecting and Portfolio Overview Reports, allowing firms to engage prospects and enabling transparency across client portfolios
- Drove internal engineering growth by leading team syncs, and demoing new features at company-wide meetings
- Created detailed Jira tickets and Confluence docs to define feature specs and streamline engineer onboarding

### Teaching Assistant - Foundations of Data Science

Aug 2024 – Dec 2024

*Khoury College of Computer Science*

*Boston, MA*

- Supported 170+ students through weekly office hours, addressing academic needs and support on course material
- Created assignments, practice work, and resources incorporating Python programming, focusing on libraries such as NumPy and Pandas, to reinforce mathematical concepts and ensure alignment with course learning objectives

### Software Engineer Intern

May 2024 – Aug 2024

*Software Engineering Institute | Carnegie Mellon University*

*Pittsburgh, PA*

- Led the development of Ovilus, a real-time cyberwarfare training and simulation observation engine, utilizing SignalR C#, HTML, CSS, and JavaScript to animate cyber exercises and highlight key decisions and outcomes
- Developed GHOSTS-LITE, a lightweight network simulation tool using .NET, to simulate realistic network activity for cyber exercises, saving 1800GB of RAM during company exercises and reducing CPU utilization by over 60%
- Configured a locally-hosted LLM codebase to leverage GPU processing, reducing query response times by 90%+
- Implemented a SQLite authentication system and logging for the LLM, ensuring secure access for authorized users

## PROJECTS

### IssueExpress | TypeScript, React, Next.js, Supabase, TailwindCSS

- Developed a full-stack web application that generates Agile Scrum tickets from Zoom meetings using the Groq API, streamlining the process of converting standup discussions into structured tickets for improved team productivity
- Designed an interactive, node-based interface to visualize, edit, and place tickets into approved/rejected workflows

### NeuroJump | Python, Pygame, NEAT-PYTHON

- Created an endless runner game with core mechanics such as collision detection, obstacle generation, and motion
- Integrated the NeuroEvolution of Augmenting Topologies (NEAT) algorithm to enable machine learning capabilities, training the system on over 500 trials to autonomously adapt until it was played to perfection