Nicolas Tabet

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Education

Purdue University, West Lafayette, IN **May 2026**
Double Major in Computer Science and Mathematics. GPA: 3.96/4.00

La Salle Passy-Buzenvale, Paris, France **Sept 2020 – June 2022**
Graduated with French Baccalaureate Highest Honors
Awards/Honors: Dean's List, Semester Honors, French Baccalaureate Highest Honors

Work Experience

ZIPPY, Montreal, Canada **December 2025 – Present**
Lead Full-Stack Engineer

- Designed and shipped core platform architecture end-to-end (frontend, backend, database), supporting live operations with stable, evolving product interfaces for laundry delivery services.
- Led ongoing scalability and reliability improvements, defining clean API contracts and coordinating backend + mobile integration to ensure smooth releases and long-term maintainability.

Aboard AI, New York City, NY **June 2025 – August 2025**
Full Stack Software Engineer intern

- Built production backend services and APIs for a commercial HR platform using React/Next.js, Express, and TypeScript, supporting scheduling, approvals, and organizational workflows.
- Designed RESTful API architecture and scalable data flows, contributing to system reliability and maintainable long-term infrastructure.

Purdue University, Lafayette, IN
Undergraduate Researcher, SecArch Lab **March 2025 – present**

- Collaborating with Prof. Kazem Taram on research aimed at improving branch predictors by exploring adaptive partitioning techniques to enhance security through thread and process independence.
- Designed and evaluated branch predictor simulations in gem5, analyzing performance and security tradeoffs across concurrent execution environments.

Software Developer, CS240: C-Programming course Development Team **January 2025 – present**

- Collaborate in a 4-person development team selected by the professor to design assignments, solutions, and test modules, improving course structure.
- Designed automated test modules and structured assignments solutions, ensuring clarity, correctness, and efficiency, reducing grading complexity and enhancing student comprehension.

Teaching Assistant **January 2025 – present**

- Lead two weekly lab sessions for CS 240: Programming in C, mentoring 40+ students in advanced C programming, memory management, data structures, and debugging techniques while fostering collaborative learning environments.
- Evaluated 500+ coding assignments monthly, identifying common mistakes and providing targeted debugging feedback to enhance student learning.

Rix Inclusive Research Institute, London, United Kingdom **May 2024 — July 2024**
Software Engineer intern

- Developed and implemented a "Make PDF" feature for a Django-based social media platform designed for people with disabilities, enabling users to seamlessly generate PDFs of their personal goals.
- Engineered a concurrent Django command, optimizing server performance and scalability, ensuring a smooth user experience while navigating undocumented legacy code and database structures.

Murex, Paris, France **May 2023 – July 2023**
Software Engineer intern

- Developed an IntelliJ plugin for a custom language in Java, streamlining coding processes and reducing manual workload, leading to a 20% productivity increase.

BMBSmart, Beirut, Lebanon **April 2020 – Present**
Python Programming Instructor

- Taught Python programming to 50+ students through personalized lessons and hands-on projects.

Skills

Technical Skills: C, C++, Java, Python, Linux, Git, SQL, MongoDB, JavaScript, TypeScript, Express, React
Languages: English (fluent), French (fluent), Arabic (fluent).

Programming Projects

Personal Home Server,

- Built and operated a distributed hybrid cloud platform (Intel NUC + VPS) unified via WireGuard mesh networking to explore low-latency distributed systems.
- Designed automated deployment and self-healing service pipelines using Docker Compose, systemd, and health-check recovery, achieving 99.9% uptime.
- Operate a mini production ecosystem to experiment with containerization, infrastructure automation, and distributed reliability.