Thi Minh Nguyet Duong

Applied Computer Science Student

- (+32) 467 66 46 83
- Leuven, Belgium
- https://nguyettmduong.wixstudio.io/portfolio
- https://linkedin.com/in/tmnduong
- https://github.com/ThiMinhNguyetDuongUCLL

PROFILE

Computer Science student with experience across web development, backend systems, and data analytics. Hands-on experience building practical solutions, from responsive UIs to robust APIs and data validation frameworks. Motivated to grow into a versatile software professional contributing to impactful projects.

TECHSTACK & SKILLS

Frontend: React, React Native, Next.js, TypeScript, TailwindCSS

Backend & Data: Node.js, Express.js, PostgreSQL, Java (Spring Boot), Python (Pandas, Airflow)

Tools & Methods: Tools & Methods: Azure, Git/GitHub, GitHub Actions, Cypress, Jest, Agile/Scrum

LANGUAGES

English — Fluent

Vietnamese — Native

EDUCATION

Bachelor of Applied Science in Computer Science

University College Leuven - Limburg 09/2023 – Present | Leuven, Belgium

PARTICIPATION

EUDRES - European University Alliance

"Talent Portal" Hackathon Participant 02/2024 | Leuven, Belgium

- Collaborated in a 36-hour intensive hackathon with a cross-disciplinary team to design and prototype "Talent Portal", a platform connecting student skills with job opportunities.
- Contributed to the frontend design and system integration, ensuring a functional and user-friendly demo within the tight timeframe.
- Practiced rapid prototyping, Agile collaboration, and pitching by presenting the solution to an international iury.
- **Outcome:** Delivered a working MVP in under two days, strengthening cross-cultural teamwork, problemsolving, and presentation skills under pressure.

PROJECTS

Course Management System

07/2025 - 08/2025

- Designed and implemented a full-stack learning platform with 8 REST controllers and 25+ secured endpoints, supporting Admin, Lecturer, and Student roles with **JWT-based authentication**.
- Built a responsive Next.js frontend with 15+ reusable components, achieving full mobile-first compatibility and 100% E2E test coverage using Cypress.
- Automated development workflow with CI/CD pipelines (GitHub Actions), database migrations (Flyway), and API documentation (Swagger UI) to ensure maintainability and scalability.
- **Tech Stack**: Java, Spring Boot, Spring Security, PostgreSQL/H2, Flyway, Next.js, React, TypeScript, Tailwind CSS, Cypress, Maven, Swagger

Vinylify - Digital Vinyl Collection Platform

05/2025

- Built backend APIs with Node.js/Express & PostgreSQL/Prisma to process RFID scans in real time, detecting duplicates and updating collections instantly.
- Designed **gamified reward logic** (bonuses, rare edition rewards, daily challenges) to boost user engagement.
- Integrated **secure authentication** with NextAuth.js & JWT, and developed a Next.js frontend enabling live scanning demos, instant recognition, and chatbot interaction.
- **Tech Stack**: RFID RC522, ESP32, Node.js, Express, Next.js, PostgreSQL, Prisma, NextAuth.js, TypeScript, Cypress

Real Estate & Environmental Data Analytics

04/2025 - 05/2025

- Developed an **end-to-end data pipeline** in Python/Pandas orchestrated with Apache Airflow, processing Nashville housing datasets with **17+ automated validation rules**.
- Integrated with Azure Blob Storage to build a real-time file monitoring system, applying risk-scoring algorithms and generating alerts for high-risk investments.
- Designed a data quality framework (null checks, range & category validation) achieving 95%+ accuracy across batch and streaming pipelines.
- **Tech Stack:** Python, Pandas, NumPy, Apache Airflow, Azure Blob Storage

Chatbot Integration Project

CCV

10/2024 - 01/2025

- Developed a chatbot widget in React/Next.js supporting real-time conversations, voice input, and role-specific responses, enhancing customer interaction.
- Implemented language localization and voice dictation (Web Speech API), ensuring accessibility across devices.
- Collaborated in a **9-member Agile team** with *CCV* Belgium, aligning technical solutions to customer needs through sprints and reviews.
- Tech Stack: TypeScript, React, Next.js, Tailwind CSS

ApplyWise - Job Application Tracking System

10/2024 - 12/2024

- Co-developed a job application tracking system, implementing both front-end and back-end features for job postings, application submissions, and user progress visualization.
- Integrated file upload functionality using Multer, enabling users to submit resumes and cover letters seamlessly.
- Documented APIs using Swagger and enhanced UI/UX with responsive design, employing Next.js and Tailwind CSS.
- Tech Stack: TypeScript, React, Next.js, Tailwind