Henri Aïdasso

Applied Research Scientist in Software Engineering and AI Ph.D. Student at École de technologie supérieure Montreal, Quebec, Canada +1 (514) 621 - 8270 ahenrij@gmail.com https://henriaidasso.me

Languages

English: Professional working proficiency | French: Native Language | Fon: Native Language

Research Interests

Machine Learning, Artificial Intelligence, Software Engineering, Intelligent DevOps, Distributed Systems, Software Architecture, Digital Twins

Education

Ph.D. in Software and Computer Engineering Dept. of Software and IT Engineering, École de technologie supérieure Thesis: Efficient and Reliable DevOps Pipelines through AI-powered Automati GPA: 4.3/4.3	2022 – 2026 (<i>expected</i>) Montreal, Canada on
M.Sc. in Computer Science — Big Data: Business Intelligence and Machine Faculty of Computer Sc. and Electronics, University of Rennes 1 Grade: Valedictorian	Learning 2020 – 2022 Rennes, France
B.Sc. in Computer Science Faculty of Computer Sc. and Electronics, University of Rennes 1 Grade: Valedictorian	2019 – 2020 Rennes, France
B.Sc. in Computer Science applied to Management Dept. of Computer Sc. and Management, University of Abomey-Calavi Grade: Valedictorian	2014 – 2017 Cotonou, Benin

Skills

Research (3 years). Machine Learning (6 years). Software Development: Python (7 yrs), Java (9 yrs), PHP (5+ yrs), Node.js (4 yrs), Javascript (5+ yrs), Kotlin (3 yrs), C++ (1 yr), Bash (2 yrs). Software Architecture (6 yrs). Databases (8 yrs). DevOps: CI/CD (7 yrs), Docker (7 yrs), Kubernetes (3 yrs). Mathematics.

Frameworks: Scikit-learn, Keras, PyTorch, FastAPI, SpringBoot, Laravel, Nest.js, Vue.js, Android SDK, Qt, Database Systems: TimescaleDB, PostgreSQL, MongoDB. Tools: Docker, Kubernetes, Postman, AWS.

Honors and Awards

Mitacs Accelerate Fellowship Applied research scholarship granted by Mitacs and TELUS.	2023 - 2025
Trophy of Excellency Best student in CS applied to Management, awarded by the <i>Club des Elites</i> of	2017 of UAC
National Mathematics Champion Winner of Benin's national selection championship for the International Ma (IMO) 2014 in Cape Town, South Africa	2014 thematical Olympiad

Benin Government Excellence Scholarship

Undergraduate scholarship awarded to top students at the national college leaving exam

EXPERIENCES

Research Scientist TELUS • Internship and Doctoral Studies

Designed research objectives to address the waste associated with flaky job failures. Identified 46 failure categories and developed a novel prioritization approach based on RFM analysis. Leveraged textual logs and Few-Shot Learning to automate the detection of flaky job failures and of priority failure categories.

Data Scientist

Energiency • Apprenticeship

Improved the energy performance of industry 4.0 factories by up to 15% using digital twins approaches: real-time energy consumption forecasting, golden batch analysis, process anomalies detection, etc.

Machine Learning Engineer

Energiency • Apprenticeship

Developed and maintained the new cloud-based backend for scaling AI model deployments in the company, including real-time distributed training and prediction tasks for dozens of ML models. Created several internal data science libraries to enforce best practices and the reusability of utility components.

Information Technology Developer	05/2020 — 08/2020
Worldline • Internship	Rennes, France

Developed monitoring tools for Tap2Use—the top 1 digital payment solution for transportation in Franceincluding daily statistics on financial data across distributed NoSQL databases for continuous checks.

Software Engineer

Arriauz Services Santé · Contract

Developed and maintained the platform of the health services mobile application *Dis-moi Doc*: instant chat with a doctor, drug prices, medication reminders - with 15,000+ downloads on Google Play Store.

Android and Web Developer

Independent and Internships

Worked as an android and full-stack web developer on various healthcare, finance, education, and business management projects, across six (06) different organizations, including the Autonomous Port of Cotonou and the Beninese Electrical Energy Company.

TEACHING EXPERIENCES

Lecturer

École de technologie supérieure · Contract

LOG680 - Introduction to the DevOps approach

Teaching Assistant

École de technologie supérieure · Contract

LOG680 – Introduction to the DevOps approach Release Engineering, Software Analytics, Testing, CI/CD, Docker, Kubernetes, Grafana, PostgreSQL

Fall 23, Winter 24, Summer 24, Winter 25 Montreal, Canada

11/2018 - 10/2020 Cotonou, Benin

2016 - 2019

Cotonou, Benin

Summer 2025 Montreal, Canada

09/2021 - 08/2022**Rennes**. France

09/2020 - 08/2021

Rennes, France

05/2023 - 04/2025

Montreal, Canada

Publications

Towards Build Optimization Using Digital Twins <u>Henri Aïdasso</u> , Francis Bordeleau, Ali Tizghadam 21st Intl. Conf. on Predictive Models and Data Analytics in Software Engineering — PROMIS	2025 SE '25
On the Diagnosis of Flaky Job Failures: Understanding and Prioritizing Failure Categories <u>Henri Aïdasso</u> , Francis Bordeleau, Ali Tizghadam 47th International Conference on Software Engineering — ICSE SEIP '25	
Build Optimization: A Systematic Literature Review <u>Henri Aïdasso</u> , Mohammed Sayagh, Francis Bordeleau Under Review at the ACM Computing Surveys Journal — CSUR	2023
Services and Volunteering	
Reviewer for the African Computer Vision Summer School (ACVSS) 20)24, 2025
Member of the Cédille scientific club of DevOps at ÉTS (Montreal, Canada) 202	23 - 2025
Junior Reviewer for the 27th International Conference MODELS' 24	2024
Vice President of the Student Office in MIAGE at University of Rennes 1 (Rennes, France)	2020
Secretary-General of the Association of Computer Science Students at UAC (Cotonou, Benin)	2017

Information Technology Educator for the EduGh project at AIESEC in Legon (Accra, Ghana) 2015