

Maxime Dupuis

Senior backend developer

15 years of experience engineering resilient, distributed web systems with experience in IoT and high throughput data ingestion and edge-to-cloud software integration

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EXPERIENCE

Novisto, Montréal, Canada — Senior Software Developer

FEB 2021 - PRESENT

Driving technical strategies within a fast-paced startup environment. Responsible for aligning product requirements with team execution and technical excellence, evolving the core codebase, defining system architecture and ensuring high levels of data integrity through robust architecture and rigorous incident management.

Technical leadership and architecture

- Architected 3+ high-impact enterprise integrations expanding product ecosystem capabilities
- Designed and implemented a high-performance data ingestion pipeline that automated complex data processing streams, significantly reducing latency and operational bottlenecks

Engineering culture

- Mentored 5+ mid-level engineers through structured code reviews and guild presentations
- Championed rigorous code review practices, establishing higher code quality standards that significantly reduced production defects and minimized feature gaps

Business impacts

- Resolved long-standing technical debt through refactoring and helping move towards the new hexagonal architecture improving feature development, separation of concerns and delivery speed
- Collaborated with Products and Stakeholders to refine requirements, development phases and acceptance criteria resulting in faster delivery and tighter timelines

Alboréa, Montréal, Canada — Senior Software Developer

JUN 2020 - FEB 2021

Responsible for developing and maintaining industry-related software ranging from the more classical management software to embedded and

PROGRAMMING LANGUAGES

Python, TypeScript, PHP

FRAMEWORKS AND TOOLS

PostgreSQL, Git, FastAPI, Django, Angular, MySQL

CURRENTLY LEARNING

Go for high-concurrency performance and system optimization

DuckDB / DuckLake for optimizing decentralized data analysis and accelerating business intelligence

LANGUAGES

French (native), English

CONTACTS

github.com/mdupuis
linkedin.com/in/dupuismax

HOBBIES

Climbing, Woodworking, Self-hosting, Biking, Hiking, 3D Printing

on-the-edge and cloud IOT software.

 Technical leadership and architecture

- Maintained and documented a LoRA-based industrial software solution, spanning edge computed embedded systems and cloud-based IoT infrastructure
- Advised on current technological, technical and strategic products

 Engineering culture

- Mentored 2 junior-level engineers through code reviews, meetings and pair programming sessions

Element AI, Montréal, Canada — AI Software Developer

JUN 2018 - APR 2020

AI Developer in charge of making research AI language models reach production.

 Technical leadership

- Set up data process and AI model learning pipelines
- Deployed AI models and make them available through highly scalable REST APIs

 Engineering culture

- Mentored a team of 5 developers and 2 applied researchers on web deployments through code reviews, detailed analyses and pairing sessions

Savoir-Faire Linux, Montréal, Canada — Open Source Software Developer

JAN 2016 - MAY 2018

Full stack developer and technical leader consulting for web-based solutions of any size and scope.

 Technical leadership

- Led a web development team on a variety of projects based on different frameworks and of different scope and business domains
- Developed and debugged low-level, machine-local network architecture to simulate complex aircraft infotainment systems for rigorous hardware-in-the-loop validation and testing

 Engineering culture

- Assisted team leaders on technical challenges and solutions
- Helped team leaders assess the technical know-how of their team members and made recommendations on how to make them learn and grow
- Mentored a team of 5 people

Ecometrica, Montréal, Canada and Edinburgh, UK — Software Technical Lead, GIS Developer

OCT 2010 - JUN 2015

Designed and developed a web-based GIS-related platform while managing an engineering team.

Technical leadership

- Acted as a lead backend developer on a state of the art web-based GIS platform
- Designed proprietary indexing and query algorithms, enabling real-time data retrieval for complex, free-form areas of interest

Engineering culture

- Mentored junior and intermediate level developers and sysadmins
- Product delivery through iterations each making speed and accuracy improvements

EDUCATION

Université de Sherbrooke, Sherbrooke, Canada — *B.Sc., Computer Science*

JUL 2006 - SEP 2010

Cégep de Drummondville, Drummondville, Canada — *Computer technology*

2003 - 2006