Jean Duquenne

 Linkedin | 📱 +41 79 252 87 77 | 🌐 jeanduquenne.com | ✉ jean.duquenne.ch@gmail.com | ⊙ Github

Empathic and results-driven software engineer with a focus on creating practical, efficient solutions and delivering user-centric software experiences that meet both business objectives and end-user needs.

Skills

- TypeScript | Python 3 | C# | C++ | JavaScript | HTML | CSS | Latex | NoSQL | MySQL | PostgreSQL | Node | OOP
- Unity 3D | React | Express | Next.js | Remix | Redux | Git | GraphQL | Rest API | Docker | Tailwind | OpenCV | Keras
- Google cloud | CI/CD | Vercel | Jest | Firebase | Unit Testing | VR | Pandas | FastAPI | Django | Figma | Oculus SDK
- Microservices | Distributed Systems | Frontend | Backend | Full-Stack | Design of experiments | Agile | English | French | Spanish

Experience

Software Engineer — Flagstonelab — *Geneva, Switzerland* — **11/2023 - 06/2024**

- Developed lightweight Shopify theme app extensions and Bubble.io widgets, delivered to 600+ high-traffic websites via CDN with excellent performance. Bootstrapped and launched 5 Micro SaaS products from scratch. (Webpack, Liquid, GraphQL)
- Built 20+ optimized, responsive, and accessible widgets for perfect display on all devices. (CSS, UX, Accessibility)
- Created scalable data pipelines using various APIs, leveraging Google Cloud services. (GCP, Data Pipelines)

CTO, Software Engineer — Qwestive - Binance Lab — *Remote / Paris, France* — **11/2021 - 11/2023**

- Designed and developed 3 award-winning applications, selected among 700+ startups for incubation by Binance and Google Startups.
- Grew user base to 50,000+, winning the BitDAO hackathon ($12.5k prize).
- Iterated towards Product-Market Fit, implementing advanced features and complex user flows including data pipelines with smart-contract tracking, multisig transactions, embedded tracking scripts, APIs, form builders, token gating, analytic dashboards, and more. (Typescript, React, CI/CD, DevOps, UX, web3, EVM, Solana)
- Led development with rapid cycles, ensuring a clean, modular, and maintainable codebase.
- Continuous Integration/Deployment Pipeline Integration, pull requests, code reviews, load/stress testing, unit/integration/e2e testing.

Computer Vision Research Engineer — Logitech — *Lausanne , Switzerland* — **08/2020 - 05/2021**

- Developed VR applications in Unity to measure and test the ergonomics of various input modalities, significantly aiding Logitech in the measurement, comparison, and improvement of their stylus. (VR, Unity, UX, C#, Design of experiments DOE)
- Designed and conducted user experiments on VR input modalities, adapting ISO 9241-411 and Fitts law for 3D interactions.
- Researched and developed virtual keyboards, including surface-aligned designs and models with integrated hardware components.
- Integrated hand tracking into Logitech's virtual meeting VR app with full functionality using hand gestures.

Software Engineer Intern — SquareFactory — *Lonay, Switzerland* — **02/2020 - 08/2020**

- Implemented an exoskeleton in a biomechanically accurate simulator.
- Applied CMA-ES for actuator optimization, achieving a realistic gait and addressing muscle weaknesses. (Python, C++, 3d modeling)

Machine Learning Engineer Intern — Bionomous — *Fribourg, Switzerland* — **09/2019 - 02/2020**

- Enhanced classification accuracy of miniature biological entities from 90% to nearly 100% by shifting from a Gaussian mixture model to a deep learning framework. (Python, Keras, TensorFlow)
- Developed a classification framework using convolutional neural networks (CNNs), reliable performance on an Android device.

Education

MS Robotics and Machine Learning — Swiss Federal Institute of Technology, EPFL — *Switzerland* — **09/2018 - 06/2021**

BS Microengineering — Swiss Federal Institute of Technology, EPFL — *Switzerland* — **09/2015 - 09/2018**

Google UX Design Certificate (2023); 4 web development and data science-related online courses.

Baccalauréat Scientific — CDL International School — *Versoix, Switzerland* — **- 09/2015**

Projects

- **SOLSPONSOR:** Developed a platform similar to Patreon, integrating Solana transactions and NFTs. 2021
- **E-COMMERCE:** Created fully automated e-commerce stores using diverse Python scripts, generating over $900k in revenues since 2020.
- **STRESS DETECTOR:** Engineered a stress detector wearable device measuring HRV, BPM, and shaking, providing live feedback. (2019)
- **EYESIT**: Created Tensorflow-powered wearable camera alerting visually impaired users of obstacles in real time. (2019)

Work Qualities

Moving quickly and confidently, I excel in collaboration, conflict resolution, and rapid software development cycles. I'm dedicated to going the extra mile and possess great problem-solving abilities. Outside of work, I enjoy running, DnD, VR, cooking, and being a health nut.