

# Alexander Hoffmann

Looking for a software engineering position or freelance contract

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## EDUCATION

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- **ECE Paris** France  
*Master of Science in Computer Science* 2016 – 2021
- **University of California San Diego** CA, USA  
*Extension program in Computer Science and Engineering* 2018

## EXPERIENCE

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- **CEO & Founder** Paris, France  
*HOFFMANN.AI* 2020 – Present
  - **Spotmydive** Write client-side code (GatsbyJS) for web-based high-volume production application (120,000 unique visitors/mo). Improve conversion rate and overall SEO by 20%.
  - **Machine Break** Produce front-end code to create a polished and highly functional user interface with a focus on usability and an accurate representation of the approved design mocks.
  - **Orange** Design, create and maintain a scalable web-based dashboard application using TypeScript and MongoDB for back-end and ReactJS for front-end. Reduce customer acquisition cost by 5%.
  - **GEFCO** Design, develop, test, deploy, maintain and improve front-end (ReactJS) and back-end (C#) for highly available web application. Improve work performance and productivity by 10%.
- **InfraOps Engineer** Paris, France  
*Adaltas* 2021
  - Build infrastructure frameworks, systems and tools to deploy new global Adaltas products that scale over millions of users.
  - Ensure that on-premise and cloud-based systems and infrastructure is designed appropriately for security to ensure protection against current and future threats.
  - Carry out deployment, maintenance, monitoring, and management tasks within a cloud structure.
- **Digital Competence Instructor** Bonn, Germany  
*Deutsche Telekom* 2021
  - Plan for and implement digital devices and resources in the teaching process.
  - Use digital technologies and services to enhance the interaction with learners, individually and collectively, within and outside the learning session.
  - Enable learners to use digital technologies as part of collaborative assignments, as a means of enhancing communication, collaboration and collaborative knowledge creation.
- **Junior Software Developer** Düsseldorf, Germany  
*Sadnacaya GmbH & Co. KG* 2018 – 2021
  - Contribute to a wide variety of projects using natural language processing, artificial intelligence, data compression, machine learning and search technologies.
  - Configuration of a Manjaro VM onto a QNAP NAS to automatically back up mission-critical data on Write-Once-Read-Many archive storage.
  - Provide advanced corporate network infrastructure and server support.
- **Assistant professor of Computer Science** Paris, France  
*ECE Paris* 2020
  - Teach and supervise two classes of 35 undergraduate students in C and C++.
- **Software Engineering Intern** Paris, France  
*Adaltas* 2020
  - Research, conceive and develop software applications to extend and improve on Adaltas' product offering.
  - Contribute to DevOps processes and the requirements of producing and operating a machine learning model.
  - Collaborate on scalability issues involving access to data and information.
- **Software Developer Intern** Paris, France  
*Préfecture de police de Paris* 2019
  - Development of a Java application to control backups and automatically notify system administrators.
  - Implement new features to local web applications to meet user demands and improve overall performance.
- **Software Tester** Düsseldorf, Germany  
*Ayacandas GmbH* 2017 – 2018
  - Development of an exchange platform for hospitals and other medical institutions.
  - Quality control of the system to ensure that the software solution developed meets the requirements.
  - Analysis of the anomalies, documentation of the tests carried out and progress report on the test campaign.

## VOLUNTEERING

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- **Treasurer** Paris, France  
*Genius Campus Eiffel - entrepreneurship club* 2019 – 2021
  - Overseeing and presenting budgets, accounts and financial statements to the management committee.

## OPEN SOURCE PERSONAL PROJECTS

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- **Wava (Java)** [github] : Collection of general-purpose utility classes with wide applicability.
  - Created static methods that operate on or return hash-maps.
  - Implemented unit tests using JUnit.
  - Continuous integration using Travis CI.
- **Docsight (Python)** [github] : A tool for analyzing scanned files and export their content.
  - Used OpenCV to remove noise and clean up image.
  - Implemented Tesseract OCR to recognize text from image.
  - Exported content as JSON, could easily be exported to a NoSQL database.
- **School Management Tool (Java Spring)** [github] : A web-based, extensible platform for managing schools.
  - Used Hibernate to implement a relational database.
  - Created a dynamic search engine using Elasticsearch.
  - Deployed web application to AWS.
- **Ecezon (PHP Laravel)** [github] : A free, open-source e-commerce platform written in PHP based on Laravel.
  - Implemented online payments with Stripe.
  - Created dynamic search engine using Algolia.
  - Deployed web application to Heroku.
- **Mini Router (C/C++)** [github] : Simple router given a static network topology and routing table.
  - Created a simple router given a static network topology and routing table.
  - Implemented ping and traceroute to and through the router.
  - Handled various Ethernet packets including ARP, TCP/UDP, HTTP and ICMP.

## OPEN SOURCE CONTRIBUTIONS

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- **Node.js Nikita (CoffeeScript)** [github] : Automation and deployment solution with Node.js.
  - Migrated and refactored low level functions of the core engine.
  - Implemented unit tests to ensure functioning of actions both locally and remotely (via ssh).
  - Created Docker containers to ensure tests are executed in a proper Linux-based environment.
- **gatsby-theme-catalyst (ReactJS)** [github] : Themes and starters to accelerate development with GatsbyJS.
  - Improved post footer styles and format in blog themes.

## TECHNICAL SKILLS

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- **Languages (alphabetically)** : C, C++, Java, JavaScript, L<sup>A</sup>T<sub>E</sub>X, Markdown.
- **Big Data & Analytics** : Ambari, Elasticsearch, Hadoop Stack.
- **Databases** : MongoDB, MySQL, PostgreSQL.
- **DevOps & InfraOps** : Ansible, Docker, Git, Kubernetes, Maven, Unix, Vagrant.
- **Web technologies** : AWS, CSS, HTML, Java Spring, NodeJS, ReactJS, Shopify, Wordpress.
- **Other Software & Technologies** : Computer Vision (OpenCV), Networking, vim, Virtualization.

## SKILLS & INTERESTS

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- **Languages** : French (mother tongue), German (mother tongue), English (fluent), Spanish (notions).
- **Actuarial science** : applying mathematical and statistical methods to assess risk in finance.
- **Chess** : Ranked approx. 1600 elo.
- **Athletics** : 2018 vice-champ in 100-metre dash, third place in triple jump at the regional level (Île-de-France).
- **Sailing** : seaman with a track record of successfully operating and supervising boating excursions.