

Alexander Hoffmann

Passionate Software Engineer with Infrastructure expertise.

Email : alexander@hoffmann.ai

Mobile : +33 6 76 02 20 22

EDUCATION

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

PROFESSIONAL EXPERIENCE

- **Société Générale** Paris, France
Software Engineer 2021 – Present
 - Full-time software engineer in the Société Générale advanced development team on LUCID project.
 - Building a REST API to programmatically manage Hadoop clusters. It provides configuration and service lifecycle management, service health metrics, and setting up high availability and decommissioning.
 - Working on SSO integration, clustering interface support, and appliance stack management.
- **Hoffmann ai** Paris, France
Founder & Tech Lead 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%.
 - **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%.
- **Deutsche Telekom** Bonn, Germany
Digital Competence Instructor 2021
 - Research and coursework towards a technical certification with a focus on the Web.
 - Taught Programming Languages and Network Security in the context of Web development.
- **Sadnacaya GmbH & Co. KG** Düsseldorf, Germany
Software Developer 2018 – 2021
 - Contributed to a wide variety of projects using natural language processing, artificial intelligence, data compression and search technologies.
 - Configured a Manjaro VM onto a QNAP NAS to automatically back up mission-critical data on Write-Once-Read-Many archive storage.
 - Provided advanced corporate network infrastructure and server support.
- **Adaltas** Paris, France
Software Engineering Intern 2020
 - Contributed to an open-source provisioning, configuration management, and application-deployment software enabling infrastructure as code.
 - Worked on scalability issues involving access to data and information.
- **Préfecture de police de Paris** Paris, France
Software Development Intern 2019
 - Developed a Java application to control backups and automatically notify system administrators.
 - Implemented features to internal web applications to meet user demands and improve overall performance.
- **Ayacandas GmbH** Düsseldorf, Germany
Software Tester 2017 – 2018
 - Development of an online exchange platform for hospitals and other medical institutions.
 - Worked on quality control of the system to ensure that the software solution meets the requirements.
 - Performed analysis of the anomalies and documented progress report on the testing campaign.

ACADEMIC EXPERIENCE

- **ECE Paris** Paris, France
Associate Professor of Computer Science 2020 – 2021
 - Graduate student instructor for advanced computer science courses.
 - Shared responsibility for leading sections, developing coursework including homeworks and projects.

VOLUNTEERING

- **President & Founder** Paris, France
2021 – Present
Les Voiles Françaises - sailing club
 - Organized and participated in committee meetings and club activities, as needed.
 - Developed budget of the club and managed its budgeting affairs, efficiently.
- **Treasurer** Paris, France
2019 – 2021
Genius Campus Eiffel - entrepreneurship club
 - Oversaw and presented budgets, accounts and financial statements to the management committee.

OPEN SOURCE PERSONAL PROJECTS

- **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

- **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.

TECHNICAL SKILLS

- **Languages (alphabetically)** : C, C++, Java, JavaScript, \LaTeX , Markdown, Python.
- **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, googling, networking, vim, virtualization.

SKILLS & INTERESTS

- **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.