

Alexander Hoffmann

Software Engineer with Infrastructure expertise and an interest for Finance.

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PROFESSIONAL EXPERIENCE

- **Lombard Odier Group** Geneva, Switzerland
Trading Operations Specialist 2023 – Present
 - Collaborate with traders, portfolio managers, and other stakeholders to ensure smooth trade execution and settlement processes. Reduced settlement error rate by 5%.
 - Execute and monitor trades across multiple asset classes, ensuring accurate and timely processing.
 - Conduct reconciliations, trade matching, and exception management to resolve discrepancies efficiently.
- **Société Générale** Paris, France
DevOps Engineer 2022 – 2023
 - Collaborated with the team to design and develop the technical architecture for infrastructure, including virtualization and Linux systems, catering to both On-Premise and Infrastructure as a Service platforms.
 - Demonstrated strong troubleshooting and problem-solving skills by diagnosing and resolving intricate issues encountered in both On-Premise and Cloud environments. This included identifying root causes, implementing effective solutions, and ensuring minimal disruption to operations.
 - Collaborated with cross-functional teams to effectively deploy and manage infrastructure changes, ensuring seamless integration with existing systems and minimizing downtime.

Software Engineer 2021 – 2022

 - Developed a robust and scalable REST API to streamline the management of Hadoop clusters. The API facilitates essential functionalities such as configuration and service lifecycle management, service health metrics, and the seamless setup of high availability and decommissioning processes.
 - Contributed to the seamless integration of Single Sign-On (SSO) authentication into the Hadoop cluster management system, ensuring enhanced security and ease of access for users.
 - Collaborated closely with the team to develop a clustering interface support feature, enabling seamless interaction and efficient communication within the cluster environment.
- **CEVA Logistics** Paris, France
Software Developer 2020 – 2022
 - Developed a robust web application using modern technologies and a back-end framework to facilitate KPI tracking, dashboard creation, and QHSE management.
 - Designed and implemented interactive dashboards using data visualization libraries to provide real-time insights into various aspects of CEVA Logistics' operations, enabling data-driven decision-making.
 - Implemented stringent security measures and data encryption protocols to ensure the confidentiality and integrity of sensitive QHSE data, supporting CEVA Logistics in maintaining high standards of quality and safety throughout its operations.
- **Sadnacaya GmbH & Co. KG** Düsseldorf, Germany
Software Developer 2019 – 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.
- **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.

ACADEMIC EXPERIENCE

- **ECE Paris** Paris, France
Associate Professor of Computer Science 2020 – 2021
 - Completed coursework modules encompassing various programming languages commonly used in web development, such as HTML, CSS, JavaScript, and frameworks like React and Angular.
 - Explored the intricacies of network security within the context of web development, delving into concepts such as secure authentication, encryption, and protection against common web vulnerabilities.

EDUCATION

- **ECE Paris** France
Engineering Degree in Computer Science 2016 – 2021
 - Computer Networks: concepts, principles, and practice of computer communication networks with examples from existing architectures, protocols, and standards with special emphasis on the internet protocols.
 - Database Systems: database models including relational, hierarchic, and network approaches. Implementation of databases including query languages and system architectures.
- **University of California San Diego** San Diego, USA
Extension program in Computer Science and Engineering 2018
 - Operating Systems: structures, concurrent computation, scheduling, synchronization mechanisms and more.
 - Computer Security: risk analysis, authentication and authorization, access control mechanisms and more.

VOLUNTEERING

- **President & Founder** Paris, France
Les Voiles Françaises - sailing club 2021 – Present
 - 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
Genius Campus Eiffel - entrepreneurship club 2019 – 2021
 - 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.
- **School Management App (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.
- **eCommerce App (PHP Laravel)** [github] : A free open-source e-commerce platform written in PHP 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, L^AT_EX, Markdown, Python.
- **Big Data & Analytics** : Ambari, Elasticsearch, Hadoop Stack.
- **Databases** : MongoDB, MySQL, PostgreSQL.
- **DevOps & InfraOps** : Airflow, Ansible, Docker, Git, Jenkins, Vagrant.
- **Web technologies** : AWS, CSS, HTML, 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).
- **Chess** : ranked approx. 1600 elo.
- **Athletics** : 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.