# Alexander Hoffmann

Looking for a 6 months software engineering internship during Summer 2021 Mobile: +33 6 76 02 20 22

#### **EDUCATION**

ECE Paris France

Master of Science in Computer Science

Sept 2016 - Sept 2021 (Expected)

University of California San Diego

CA, USA

Extension program in Computer Science and Engineering

Sept 2018 - Dec 2018

Email: alex@ahff.dev

#### EXPERIENCE

#### Software Developer

Paris, France

Free lance

April 2020 - Present

- Write server-side code for web-based high-volume production application (120,000 unique visitors/mo).
- o Design, develop, test, deploy, maintain and improve software.

# Junior Software Developer Sadnacaya GmbH & Co. KG

Düsseldorf, Germany

Aug 2018 - Present

- 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

Aug 2020 - Oct 2020

• Teach and supervise two classes of 35 undergraduate students in C and C++.

## Software Engineering Intern

Paris, France

Adaltas

April 2020 - Sept 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

Jul 2019 - Aug 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.

## **Assistant IT Administrator**

Düsseldorf, Germany

Baum Reiter & Collegen

July 2018 - Aug 2018

- Participation in the creation and automation of complaints.
- o Assistance and advice of users on site.
- Supervision of cloud platforms.

# Software Tester Ayacandas GmbH

Düsseldorf, Germany

May 2017 - June 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.
- o Analysis of the anomalies, documentation of the tests carried out and progress report on the test campaign.

#### Student Trainee in IT Services

Mohneim, Germany

Sinell EDV Zubehör GmbH

Jan 2018 - Feb 2018

- o Observation in the design, installation and maintenance of high-end firewall, client-server and VPN solutions.
- Repairs on laptops / PCs / server systems.
- Networking of high-end printers.
- o Mission as Computer Maintenance Technician at the Cologne Hospital.

# VOLUNTEERING

Treasurer Paris, France

 $Genius\ Campus\ Eiffel - entrepreneurship\ club$ 

Apr 2019 - Present

Overseeing and presenting 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.
  - o Continuous development 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.
  - o 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.
  - o Created dynamic search engine using Algolia.
  - o 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.
  - o 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.
  - o 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.

#### Web Development Projects

- Spotmydive (ReactJS & Wordpress) [website]: News and magazine on the underwater world.
- Machine Break (Gulp) [website]: Self-service retailer specialized in coffee and convenience foods in the workplace and public spaces.
- Personal Portfolio (ReactJS) [website]: Compilation that exemplifies my skills, education and experiences.

## TECHNICAL SKILLS

- Languages (alphabetically): C, C++, HTML/CSS, Java, JavaScript, LATEX, Markdown, ReactJS, SQL.
- **OS**: Linux, Microsoft Windows.
- Software & Technology: AWS, Computer Vision, Databases, DevOps, Elasticsearch, Gatsby, Git, Hibernate, Maven, Networking, NodeJS, OpenCV, vim, Virtualization, Web Technologies, Wordpress.

## 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. 1500 elo.
- $\bullet$   ${\bf Sports}:$  athletics, cycling, sailing.