# **Simon Ahm**

## Lead Software Developer & Architect

## Resume

An adept Lead Software Developer and Architect with over 8 years of experience in crafting and implementing cutting-edge software solutions across various industries, including e-commerce, transportation, and cybersecurity. Specializes in microservice-based architectures, agile development, and continuous integration, with a strong emphasis on automated testing and web scraping technologies.

## **Competencies**

## Area of work/work roles

Skill	Level*	Last Use	Years
Web Scraping and Data Extraction	5	2024	5
Software Development (Python, PHP, JavaScript)	5	2024	7
Data Analysis and Reporting	4	2019	3
Lead Developer and Architect	5	2024	5
Integration Architect and Project Lead	5	2024	2
Chief Technology Officer	4	2024	2
Client Communication and Relationship Management	5	2024	8
Agile Project Management	5	2024	8
Microservice Architecture Design	5	2023	3
Automated Software Testing (Cypress, Selenium)	5	2022	2
Cloud Computing and Server Management (AWS, Linux)	4	2019	4

## Experience from different sectors

Skill	Level*	Last Use	Years
E-commerce Compliance Automation	5	2024	1
Integration Solutions for Transportation	4	2023	1
Intellectual Property and Fraud Detection	5	2019	3
Adversarial Data Collection and Web Scraping	5	2024	4
Software Development and System Architecture	5	2024	7
Project Management and Agile Methodologies	5	2023	8

<sup>\*</sup>On a scale between 1-5 - where 5 is an expert

## Technologies (languages, tools, platforms, databases)

Skill	Level*	Last Use	Years
Python, Flask, Selenium	5	2024	6
Typescript, Cypress	4	2023	1
Docker, Kubernetes	2	2023	1
Agile and Kanban Tools	4	2023	8
Boomi Integration Platform	4	2022	1
AWS EC2, Linux Server Management	4	2022	4

### Methods

Skill	Level*	Last Use	Years
Agile Methodology (JIRA, ClickUp)	5	2024	6
Microservice-based Architecture	5	2024	3
Automated Testing and Continuous Integration	4	2023	2
Web Scraping and Data Extraction Techniques	5	2024	3
Data Normalization and Database Design	4	2024	3
Client Communication and Requirement Analysis	5	2024	8

## **Project Experience**

## Danish Safety Technology Authority (2022-2023)

**Project Description:** Architected and led the implementation of an automated, microservice-based compliance solution for evaluating e-commerce webshops against EU regulations. This encompassed system design, proposal writing, requirement analysis, implementation, optimization, documentation, and continuous integration of SME feedback through an agile process.

### Role/Responsibility:

- Solution Architect and Proposal Writer
- Lead Developer
- Mentor for development team
- Scope Manager ensuring project alignment
- Onboarding Specialist for external talent

#### **Results:**

- Developed a scalable and adjustable system architecture
- Reduced product evaluation times from 60 minutes to approximately 1 minute
- Enabled parallel development progress
- O Delivered a usable, value-adding, and maintainable solution within project constraints

## **Applied Technologies:**

- O Python, Selenium for web scraping
- O Docker, Kubernetes for microservice orchestration
- System Design and Performance Optimization
- Technical Documentation for clear project communication

### Scandlines (2022)

**Project Description:** Assisted in the system transition analysis from BizTalk to Boomi, managing the project, leading the design and development of integration solutions, facilitating stakeholder communication, and ensuring a smooth handover of project management.

## Role/Responsibility:

- Assistant Architect and Analyst in system transition analysis
- O Project Manager and Technical Lead for the transition project
- Boomi Integration Developer and Solution Designer
- Communication Specialist and Technical Translator
- O Strategic Consultant and Architectural Contributor
- Transition Manager for handover of project management

#### **Results:**

- Provided a foundation for a tailored solution by aligning with the company's strategic goals
- Managed the project effectively, ensuring team alignment with objectives
- O Led the design and development of advanced Boomi integration solutions
- Acted as a key communicator for stakeholder understanding
- Contributed to strategic planning and coordination
- Managed a seamless transition of project leadership

## **Applied Technologies:**

- O BizTalk and Boomi for system transition and integration
- O System Analysis and Integration Design Tools
- Project Management Tools (e.g., ClickUp) for project coordination
- O Communication and Strategic Planning Tools for stakeholder engagement

## aXis for SAP (2022)

**Project Description:** Implemented automated end-to-end tests for aXis, a tool enhancing SAP integration with the Boomi platform, utilizing expertise in Boomi, browser automation, and software testing principles. Converted manually executed test cases into automated tests using Cypress, written in Typescript, to ensure comprehensive coverage and efficiency.

#### Role/Responsibility:

- End-to-End Web Test Developer focusing on browser automation and automated software testing.
- Technical communicator liaising with QA, SMEs, and SAP experts.

#### Results:

- O Automated critical web-based processes within aXis, enhancing test coverage
- Leveraged deep knowledge of HTML, JavaScript, REST APIs, and Boomi to develop robust automated tests
- Improved test efficiency and reliability by eliminating manual errors and enabling early error detection

#### **Applied Technologies:**

- Typescript and Cypress for test development and automation
- Boomi for integration testing with SAP systems
- HTML, JavaScript, and REST APIs for comprehensive web and system interaction testing

## Jobsner (2019-2022)

**Project Description:** Developed automated data collectors for multiple third-party job sites, crafting an adversarial scraping solution capable of bypassing advanced bot detection mechanisms. The project involved extracting job information despite anti-scraping techniques, managing browser fingerprints, and utilizing diverse IP addresses.

### Role/Responsibility:

- Web Scraping Specialist & Developer focused on adversarial scraping techniques and automation
- Data Architect for normalizing and structuring scraped job data

- Full-stack Developer for PHP-based job site framework creation and customization
- Automation Engineer for job classification and user interaction forwarding

#### Results:

- Successfully overcame advanced bot detection mechanisms to extract job information from third-party sites
- Managed browser fingerprints and utilized a broad selection of IP addresses to evade detection
- O Tailored scraping solutions to specific anti-scraping techniques employed by job sites
- Normalized and structured scraped job data for consistent storage in a MySQL database

## **Applied Technologies:**

- $\,\circ\,$  Python and Selenium for web scraping and browser automation
- MySQL for database management and data normalization
- PHP for job site development and templating
- o IP management tools and browser fingerprinting techniques for evading site defenses

## Cap Badge Global Pte Ltd (2018-2019)

**Project Description:** As CTO, architected and developed two advanced "DarkAlert" solutions for monitoring the dark web, specifically focusing on credit card fraud detection and sensitive information surveillance. Utilized "digital fingerprints" for sensitive information tracking and breach notifications.

## Role/Responsibility:

- Chief Technology Officer overseeing technology strategy and product development
- Solution Architect and Primary Developer for the "DarkAlert" solutions
- Lead Communicator for strategic partnerships and client interactions

#### Results:

- Designed and implemented a dark web monitoring system using "digital fingerprints" for sensitive information, enhancing client data security without compromising privacy
- Developed a specialized solution for detecting stolen credit card information on dark net marketplaces, enabling proactive fraud prevention measures for clients

#### **Applied Technologies:**

- O Python for system development and advanced web scraping
- O TOR network and other anonymized networks for dark web monitoring
- O Digital fingerprinting techniques for sensitive information surveillance without direct exposure

## CopyFighter.com (2016-2019)

**Project Description:** Led the development of a Python-based backend system for scalable data collection and automated reporting for intellectual property theft detection. Designed a system to automatically identify and extract journalist-authored articles and detect unauthorized copies on the internet.

#### Role/Responsibility:

- Technical Lead and Software Developer overseeing system design and development
- CTO guiding the project's technical direction and strategic partnerships
- Full-stack Developer creating front-end prototypes and a web-based user interface for legal case management

#### Results:

- Developed custom text comparison algorithms to accurately measure content overlap, enhancing detection of intellectual property theft
- Implemented scalable and efficient data collection and processing infrastructure using AWS

- EC2 instances and Python worker processes
- Created robust web scraping algorithms capable of extracting clean article content from diverse news site designs while avoiding ads and other noise

## **Applied Technologies:**

- Python, Flask for backend development, with Requests and Selenium for web scraping
- Elasticsearch for efficient data storage and retrieval
- O AWS EC2 for scalable infrastructure and worker process management
- o HTML, PHP, Javascript for prototype development and user interface creation

## Vassec.com (2015-2016)

**Project Description:** Developed an automated penetration testing system to identify security vulnerabilities in websites and public servers. The system, built on a combination of tools, automated the process from inputting a URL or IP address to generating detailed reports.

## Role/Responsibility:

- Information Security Professional leading the development and implementation
- Full-Stack Developer responsible for front-end and back-end development
- Linux System Administrator managing the hosting environment
- Security Analyst conducting analysis and tool selection

#### Results:

- Automated vulnerability scanning of websites and public servers, enhancing security assessment efficiency
- Integrated open-source and in-house tools into a comprehensive automated testing solution

### **Applied Technologies:**

- O Python and Bash for backend automation and scripting
- PHP and JavaScript for frontend development
- Networking tools for penetration testing and security analysis
- Linux for server management and system hosting

### Boolex (2015-2016)

**Project Description:** As a Software Project Manager at Boolex.com, managed software development projects, bridging the gap between technical teams and Danish clients. Responsible for crafting product specifications and ensuring the delivery of software solutions.

## Role/Responsibility:

- O Software Project Manager ensuring project alignment with client expectations
- O Primary Client Liaison fostering strong relationships and ensuring client satisfaction
- Issue Resolution Leader adept at troubleshooting and problem-solving
- Task Manager skilled in prioritizing and executing project tasks

#### **Results:**

- Bridged technical and non-technical domains, ensuring mutual understanding and cohesive project progress
- Cultivated a customer-centric environment, adapting to client needs and facilitating tailored solution development

## **Applied Technologies:**

- Agile and Kanban methodologies for project management and task prioritization
- PHP and WordPress for backend development and content management system customization

## **Courses and Certificates**

- Professional Developer Certification
- Associate Developer Certification
- Associate Administrator Certification
- O Professional Windows Operational Administrator Certification
- O Professional Linux Operational Administrator Certification
- Associate Master Data Hub Certification

## Languages

Danish: Native
English: Fluent