

MAURO JOSÉ PAPPATERRA

Software Developer | Academic Research | MSc in Computer Science · Uppsala University
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SUMMARY

I am a software developer with over 5 years of experience in both software and web development across various sectors including, medical, energy and computer industries. As an academic, I have published research in Artificial Intelligence, transportation and cybersecurity - some of which I have presented at international conferences - with editors such as IEEE, Springer, MDPI and the European Union's Horizon program.

GENERAL SKILLS OVERVIEW

- Software, Web, and API Development
- Python (with various libraries)
- C#, with WPF and .NET Framework
- Java
- HTML and CSS
- JavaScript, JQuery and TypeScript
- Database Systems (SQL, MySQL)
- Azure DevOps and Atlassian
- Agile Development, Git, Scrum and CI/CD
- Amazon Web Services
- GAMP-5, GDPR, ICH and GxP in Clinical Trials
- Academic Research and Writing

PROFESSIONAL EXPERIENCE

MAR 2021 – PRESENT

SOFTWARE DEVELOPER, ANTAROS MEDICAL – *Hybrid*

Antaros Medical is a Swedish contract research organization that provides imaging analysis for drug development and clinical trials.

Software Developer: Develop and maintain software for CoreLab team; Data processing and handling of medical images (MRI) using different image formats (DICOM and VTK); Extensive use of Python libraries (SciPy, Numpy, Pydicom, Jupyter Notebooks, Pandas, and more); AWS integration; Interface design with WPF in C#.

Practices: Active involvement in software design, planning and validation processes; Extensive (automate) testing and documentation; CI/CD using Azure DevOps pipelines.

Project Leadership: Serve as Lead Software Developer in multiple projects, supervising study deliveries, software design and implementation; Receive regular training in the fields of medicine, good clinical practices (GAMP-5, GxP), data integrity (GDPR) and ethical principles in research (ICH).

Impact: Streamlined internal processes for handling medical data, contributing to efficient clinical trial operations; Successfully lead several studies with big pharma companies as clients; Actively participated on the development of novel analysis methods for new endpoints.

NOV 2018 – JUN 2020

SOFTWARE DEVELOPER, MYRSPOVEN – *Hybrid/Remote*

Myrspoven is a Stockholm-based startup that uses AI and Machine Learning techniques to improve energy usage on smart buildings.

Software, Web, and API Developer: Developed software and web applications for our engineers and clients using C# and the .NET framework; Created several automation tools for internal use; Created complex SQL database schemas; Created CRUD web interfaces with HTML, CSS, JavaScript (JQuery) and ASP .NET; Designed and implemented the company landing page with WordPress.

Practices: Participated in gathering requirements, estimating timelines, designing, developing, and testing software; Code reviews and deployment activities; Testing and documentation; Worked mostly unsupervised and location independent from Europe, Asia and Oceania.

Impact: Optimized the incorporation of new BMS systems with automation tools; Created complex systems and interfaces with .NET framework; Systematically improved internal documentation of software processes.

JUL 2018 – OCT 2018

SOFTWARE DEVELOPER, FORTLAX – Remote

Fortlax is a modern and eco-friendly data center in northern Sweden.

Software and Web Developer: Developed different automation tools using C#; Created tools to import and export data from Atlassian services and syncing client information; Automated creation of Confluence wiki pages, Jira tickets, reports and more; Created interactive GUIs using WPF in C#; Created web interfaces using HTML, CSS, JavaScript and Bootstrap.

Practices: During this short three-month contract, I visited the offices in Malmö twice and worked mostly (remotely) from Uppsala.

Impact: Succeed in creating software to sync different data sources and services used within the company's data centers; Devised and implemented a web-based GUI to display all virtual machines and their statuses.

EDUCATION

2017 - 2020

MSC IN COMPUTER SCIENCE, UPPSALA UNIVERSITY

Master studies with emphasis in the fields of Artificial Intelligence, Cyber Security and Human-Computer Interaction. Exchange program at The University of Queensland in Australia in 2019. Some of the courses at Uppsala University included *Artificial Intelligence, Data Mining, Cryptology, Human Computer Interfaces, Intelligent Interactive Systems, Advance Human Computer Interaction, IT Systems and Human factors, Advance Computer Security, and Advance Database Systems* among others. Master Thesis on the application of AI within the railway industry.

2014 - 2017

BSC IN COMPUTER SCIENCE, LINNÆUS UNIVERSITETET

Bachelor studies with strong foundations of Computer Science and Software Engineering. Exchange program at California State University (Bay Area) in the United States in 2016-2017. Some of the courses included *Mathematics, Logic and Languages, Computer Networks, Operating Systems, Software Architecture and Design, Artificial Intelligence, Web-Based Systems, Software Testing, Programming and Data Structures, Analysis of Algorithms and Database Architecture* among others. Bachelor Thesis on the implementation of Bayesian Networks in cybersecurity.

LANGUAGES

- English (*Fluent*)
- Spanish (*Fluent*)
- Italian (*Advanced*)
- Swedish (*Conversational*)

MORE INFORMATION

- Located in Stockholm, Sweden
- European and Mercosur citizen