Arsenii Marchenko

Software Development | Cybersecurity & IoT | DevOps

Kuopio, Finland | Seeking opportunities in Helsinki, Espoo & Vantaa

marchenkoarsenii23@gmail.com | +358 46 541 72 31

Portfolio | GitHub / Wong2023 | LinkedIn / arseniimarchenko



EDUCATION

Bachelor of IT | Information Technology (IoT)

Savonia University of Applied Sciences

2023 - 2026

Expected graduation: December 2026

TECHNICAL SKILLS

Development
Python, React, TypeScript, JavaScript, Django, C++

DevOps & cloud
Docker, CI/CD, AWS, Linux (Ubuntu, Debian), Git, GitHub, Bitbucket

Security & industrial
Conpot, ELK Stack, Modbus/TCP, S7comm, Wireshark, Nmap, Metasploit, Kali Linux, Hashcat, Aircrack-ng

AI & data
Prompt engineering, AI-assisted development, pandas, NumPy, PyTorch

LANGUAGES

Russian: Native | English: Fluent
Finnish: Basic | Spanish: Basic

CERTIFICATES

Big Data 101
Signal Processing MATLAB
Wireless Communications MATLAB
Machine Learning MATLAB

REFERENCES

Irene Hyrkstedt
Teacher tutor, Savonia AMK
Irene.Hyrkstedt@savonia.fi

Shiva Gupta
Director / Full-stack developer, Murkhasya
murkhasya@gmail.com

Mohamed Tahri
Employer, Viking pizzeria
mohamedtahri2928@gmail.com

PROFILE

Software developer with frontend experience and hands-on cybersecurity and IoT research. Builds React/TypeScript interfaces and Python-based integrations, with an interest in DevOps and cloud engineering. Responsible for Python middleware development and AI integration in a three-person industrial honeypot thesis team.

EXPERIENCE

Cybersecurity Research Engineer

Savonia UAS | Internship | Jan 2026 - Present

- Developed **5+** web interfaces for microcontroller monitoring in cyber forensics, reducing educational lab deployment time by **50%**.
- Implemented authentication protocols and data validation, reducing the risk of successful training attacks on the lab environment by **20%**.
- Automated hardware data collection with Python scripts, increasing incident processing speed during simulations by **20%**.

Frontend Developer

Murkhasya Studio | May 2025 - Nov 2025

- Led React frontend development for a financial reporting application and POS system, delivering **40+** business-critical features within deadlines.
- Built **10+** reusable TypeScript/React UI components, reducing development time for subsequent interfaces by **35%**.
- Integrated REST APIs and WebSockets, decreasing real-time data display latency by **40%**.
- Optimized builds and media assets, improving overall page rendering performance by **15%**.

THESIS | INDUSTRIAL CYBERSECURITY

Dynamic Industrial Honeypot for ICS/OT

Team thesis | 3 contributors | In progress

PYTHON MIDDLEWARE DEVELOPMENT AND AI INTEGRATION

- Developing Python middleware between protocol-facing interfaces and shared plant state, including command validation and persistent state updates.
- Integrating a background AI process with a virtual boiler model: temperature, pressure, water level and two pumps, with actual process state separated from spoofed sensor readings.
- System context: Conpot, Modbus/TCP and Siemens S7comm, with structured attacker-action logs, an HMI dashboard and ELK analysis to trace attacks and process responses.

SELECTED WORK & PORTFOLIO

Octo3d printing-farm UI; honeynet (Cowrie, Suricata, OpenWrt). More projects in the portfolio.

https://wong2023.github.io/my_website/

Additional experience: Savonia tutor (2024/25), real estate sales and delivery.