# Tymon Żarski

Mazovia, Warsaw · tymon.zarski@gmail.com · +48 662 063 094 · CitHub

## **Summary**

A highly skilled Senior Software Engineer with a Bachelor's in Computer Science from Warsaw University of Technology and international experience from Universitat Politècnica de València. Expertise in full-stack development, NLP systems, and automation, with a strong background in Python, React, TypeScript, and Docker. Proven track record in improving processes, enhancing security, and leading technical interviews and project planning. Committed to continuous improvement and innovation in software engineering.

#### **Skills & Interests**

**Technical:** Python, React, TypeScript, JavaScript, C++, bash

Tools: Docker, VSC, GCP, Netlify, Github (Actions), Git, GitLab, Asana, Playwright

Others: Figma, Miro, LucidChart, Latex, Microsoft Office Applications

Language: C1 Academic English, Polish Native, Spanish A2

Interests: Competitive programming, interface design, golf, photography

## **Experience**

## mBank S.A. @ mServices

# Senior Software Engineer Fullstack

Warsaw, Mazovia 06.2021 – 09.2024

- Engineered, designed, and implemented a refreshed **Python-based** NLP system for **mKanon** based on the FastAPI, Spacy, Morfeusz2, and data classification using **scikit-learn** for clustering and linear models and dimension reduction. Along the way, I established standards for **Python** scripting, static code linting, styling, and environmental variables handling.
- Proposed and implemented a system on FastAPI with a dashboard for task data analysis and preprocessing to detect the underlying structure of the refined tasks and logged time sheets to increase internal process performance using pipeline, including components **scikit-learn** for clustering and data processing with **flair** for description task processing.
- Maintained "CCL Component Library"—programmed and grouped components that created the mBank Design System, including implementing 5 L-size components, adding major features to 10+ of them, testing in Jest/RTL, and coding numerous UI pages combined with API on top of business logic.
- Developed multiple SPA connected to internal and external API endpoints used by mBank clients.
- Detected, reported, graded (CVSS), and resolved frontend vulnerabilities inside of the internal and external applications, ensuring high security.
- Introduced new life to **mKanon** by creating fresh logic working on an internally handled version of DOM, allowing users to work with text editors and playing a crucial key in developing Outlook add-in.

Tech stack: React, TypeScript, Python, scikit-learn, flair, spaCy, FastAPI, NextJS, CRA, SCSS, style-components

## **Automation & DevOps**

- Modeled and implemented GitHub workflow to create visual tests for all Design System components using <u>Playwright</u> to test non-braking visual changes, eliminating human error efficiently.
- Engineered and documented tool for pulling Gmail mails, processing, and finally uploading contents as the Asana support task. The tool integrates Gmail API, Google Cloud Platform, Pub/Sub socket scheme, and REST API integration. The system was built with the Python programming language, AWS functions, and GCP.
- Refactored compilation scripts for **mKanon NLP tagger** to CMake that optimized build time for 50% of the base. Resolved all compilation errors from the old GCC version and new clang-tidy configuration.

Tech stack: Python, C++, C, Scala, GitHub Actions, Docker, GCP, Bash, WebSockets

#### Consulting

- Hosted front-end and back-end technical interviews with a newly designed process, allowing for more accurate assessment and comparison between potential candidates.
- Led project planning and definition processes, providing clarity in cost estimating and conducting technical analysis. Collaborated effectively with cross-functional teams to ensure successful project outcomes, fostering a culture of transparent communication and efficient resource allocation.
- Improved workflow efficiency and collaboration by implementing innovative solutions, resulting in significant time savings for creative agencies and enhancing team dynamics.

 Demonstrated adaptability and problem-solving skills by developing tools and systems that streamlined task management and data processing, enhancing overall productivity.

Tools: Figma, Miro, LucidChart, Latex, Microsoft Office Applications, Google Suite Applications, Python

Fintech (NDA)

Warsaw. Mazovia

09.2020 - 06.2021

Front-end developer ■ Developed and maintained responsive web applications using React, Redux, and styled-components to create elegant, user-friendly interfaces. Utilized Redux for state management, ensuring efficient data flow and improved maintainability.

■ Proficient in test-driven development using Jest, focusing on writing comprehensive unit and integration tests to ensure the reliability and quality of frontend code. Deployed applications in Docker containers, optimizing scalability and facilitating seamless API integration for responsive web design principles.

Tech stack: React, TypeScript, Redux, styled-components, Jest, Puppeteer, Docker, Figma

**Onwelo** 

Warsaw, Mazovia

07.2020 - 09.2020

# Front-end developer, internship

■ Experienced in creating commercial web applications for the banking sector and using the Angular 11 framework, JavaScript, and TypeScript programming languages and client-side application development.

• Optimized internal web application to improve the office organization during the pandemic.

**Tech stack:** Angular, TypeScript, Docker, Protractor

### **Education**

# **Warsaw University of Technology**

pl. Politechniki 1, Warszawa

**GPA 4.56** 

Bachelor's Degree, Computer Science Concentration: Computer Systems and Networks

Thesis: Increasing privacy by removing sensitive data from text (NLP, ML, Al). The system is based on the Mitie, Spacy combined with a dashboard and Chrome extension, which collects data from GoogleMeets to anonymize it for later LLM processing. The backend was developed with Django, FastAPI, WebSocket, and REST API endpoints.

## Universitat Politècnica de València

Valencia, Spain

Study abroad coursework, mainly in the faculty of Escuela de Ingeniería Informática but also in Escuela de Ingenieros de Telecomunicación, participating in courses in Software Engineering.

## **Leadership and Activities**

# **Innovative Information Technology Science Club Delta**

Warsaw, Mazovia

**Member of the Board** 

11.2021 - now

■ Composed ideas for projects concerning synchronizing study calendars with popular online calendars such as Google Calendar or Microsoft and the "Delta Meet" project devoted to allowing students to meet up during the breaks.

GoIT

Valencia, Spain

Mentor 9.2022 - 12.2022

Demonstrated leadership and mentorship skills by guiding and supervising a team of junior developers in projects involving HTML, CSS, JavaScript, and React. Led code reviews, provided constructive feedback, and conducted regular knowledge-sharing sessions, fostering a collaborative and learning-oriented environment while consistently delivering high-quality web solutions.

# **Warsaw University of Technology**

Warsaw, Mazovia

## Representative of the academic Golf team

6.2023 - now

■ As a dedicated representative of the Warsaw University of Technology's academic golf team, I honed my leadership and team collaboration skills while embodying the spirit of competitiveness and excellence. My role involved coordinating team activities, representing our university at national tournaments, and fostering a culture of perseverance and sportsmanship among peers.