Sandra Modzelewska

Senior Full-Stack Developer with a back-end focus and over 15 years of experience in the industry.

Skill Overview

Recent: expert Python and Typescript development, system design, experienced at project planning and execution, mentoring and pairing, basic frontend development.

In the distant past: Java and C development, network administration, enterprise application integration.

Contact

I live in Haarlem, Netherlands.

Email: modzero@modzero.xyz
GitHub: https://github.com/modulozero
LinkedIn: https://www.linkedin.com/in/modzero/

Work Experience

Senior Python Developer, Carbon Equity, May 2024 – current

- Mentoring and pairing with other developers.
- Refining development project proposals, using the "Shape Up" development process.
- Multiple specific projects, including:
    - Enhancing the website's activity feeds, including fetching 3rd party website metadata.
    - Enhancing existing end-user facing charts and implementing new ones.
    - Working on our update emails.

Sabbatical September 2023 – April 2024

- Rest and personal projects.

Senior Python Developer, Fresh Books, September 2022 – August 2023

- Implementation and design of integrity checks for the payment subsystem.
- Work on the internal "keeping the lights on" team for the payment's module.
- Participation in technical design conversation, contribution to internal best practices, standards, and norms.
- Pair programming with junior as well as peer colleagues, mutual skill development.

Senior Python Developer, Blue Canvas, November 2021 – June 2022

- Implementation of new permission mechanics for a full-stack TypeScript application.
- Implementation of a permission model for a similar, Python + Type Script stack.
- Integration of error reporting and performance via Sentry, including filtering to counter excessive resource use.
- Back-end support for front-end work, including multiple Salesforce integrations.
- Pairing and supporting of less senior developers.

Senior Python Developer and Team Lead, Solar Monkey, January 2019 – October 2021

- Taking over a team of 2 junior developers and mentoring them.
- Implementing a new, more responsive team direction and work cadence.
- Code review and frequent pairing.
- Mentoring of new junior developers, as well as seniors coming from other programming languages.
- Introduced TypeScript support into our front-end pipeline and converted some critical parts of the front-end into TypeScript.
- Implement a new way of managing various monitoring products.
- Implement a new communications system for our internal support, including a Postmark integration.

- Implemented billing and ticketing systems as event-driven solutions, using domain-driven development methodology.
- Processing geodata inputs.

Senior Python Developer, MagnaVersum, October 2017 – December 2018
- Build pipeline automation with Gitlab.
- Migration from a custom Docker deployment to Kubernetes on Google Cloud Platform
- Reorganization of existing services using Ansible
- Improved local development environments for a medium-sized Django + ReactJS application.
- Code review and refactoring
- Prototyping of business analytics applications based on both Flask and NodeJS backends and ReactJS frontends.

Python Developer, TMG Digital, June 2015 - September 2017
- Development on both fronted and backend of speurders.nl
- Maintenance and improvement of old Python codebase
- Project and prototyping work on a new, Go and micro service-based website.

Perl Developer, Booking.com, 2012 - May 2015
- Work on intranet services for customer support agents, html and Perl coding of quality-of-life features, preliminary work on automation services
- Big Data work, implementation of certain Hadoop views and several Java UDF

EII Developer, eConsulting Sp. z o.o./Roche Polska Sp. z o.o., 2011 - 2012
- webMethods integration services development and code review, implementation and debugging of Java services.
- MetaMatrix integration programming, development of custom JDBC connectors, interaction with Oracle, MSSQL, MySQL and SQLite databases.
- Work in a highly distributed, international environment.

Java Programmer, Serapis Sp. z o.o., 2008-2010
- webMethods enterprise integration programming for the telecommunications company Orange.
- Design of an internal static analysis utilities for webMethods flow language.
- Coordinating a coworker while working on some projects.

System administrator, Signoff Sp. z o.o., 2006-2011
- System administration for a web design/hosting services company
- Some Django and Ruby on Rails development

HPC programmer, Uniwersytet Warszawski, 2007-2008
- Working with a team developing a sequence alignment algorithm for Playstation 3 cluster, based on a Smith-Waterman variant. Developing a C-based network integration solution for said cluster, and a proof-of-concept implementation of Smith-Waterman for Cell processors.
- Design and development of a Python-based supervisor for a NVidia CUDA based database acceleration cluster ordered by Prokom.

Network administrator, Uniwersytet Warszawski, 2005-2006
- Design and implementation of a wide area network supporting over 2500 users.
- Implementation of tools for support staff, including a PHP billing solution and integration with voice modems for tech support.
- Implementation of a custom network authentication solution involving Postgres, C and SSH.

Network administrator, Efekt Sp. z o.o., 2000-2001
- Network administrator for web design and hosting firm. System maintenance, PHP and CGI (in C) programming and technical support.

Other projects

Website for a psychotherapy consultancy (2011)

Development of a website implemented in Python and Django, cooperation with a visual designer, custom CMS.

System administration for mSoft Sp. z o.o. (2007-2010)

System administration projects for an outsourcing company, including MySQL and some Oracle administration.

Education

• Warsaw University, Mathematics, 2001-2004, unfinished bachelors' program.

Languages

Polish (native), English (fluent), Dutch (basic)