

Thomas Raczkowski

Python Back-End Developer

github.com/ratchek • linkedin.com/in/thomas-raczkowski/ • ratchek.com/

Skills

Python, Django, Linux, Bash Scripting, Git, SQL, PostgreSQL, AWS Lambda, AWS S3, Java

Experience

Web Developer

Oct 2021 – present

Our Lady of Consolation RCC Brooklyn, Part-time

choirhub.org/

- Spearheaded the development of 'ChoirHub', a comprehensive **Django**-based platform that manages both PDF sheet music and vocal recordings for multiple voice part, complete with an admin backend that enables the choir leader to effortlessly manage resources without the necessity for any coding knowledge.
- Significantly increased individual at-home practice rates among members from 12.5% to 50%, directly enhancing the speed and quality of learning new compositions for group performances.

olc-brooklyn.com/

- Revamped the church website by integrating an admin panel and upload handling using **Django** and **PostgreSQL**, increasing ease of use and slashing weekly website update time by 90%.
- Optimized web performance by migrating media files to **Amazon S3**, cutting webpage loading times by 65%.

Other

- Developed a hands-free, head-gesture operated counter using **Python** with computer-vision and machine learning libraries (**cv2** and **dlib**), reducing counting errors made by the organist during church service by 80%.
- Engineered a **Python**-based daemon hosted on **AWS Lambda** that automates hymn recommendation retrieval and dissemination via SMS, streamlining weekly preparation processes and cutting preparation times by 10%.

Django developer

Jan 2023 – Sep 2023

Tar Technology, Freelance

door2door.nyc/

- Developed a robust **Django**-based tracking system for real estate canvassing, which streamlined record management for real estate agents by 90% and reduced error rates by 10%.
- Seamlessly integrated NYC housing databases into our system using **PostgreSQL**, enhancing homeowner lookup speeds by 50% and improving operational efficiency.

Projects

- **Vorta** – Proposed, initiated and created a 'development mode' for Vorta, an open-source, **Python**-based **GUI** for the Borg deduplicating backup application. This mode effectively safeguarded developers' personal files and streamlined the development process by sandboxing settings, cache, and temporary files. This ensured that developers could experiment without the risk of affecting their personal file backups, promoting a safer and more efficient development environment.
- **Registrar Automation for BADC** - Automated data migration using **Ruby**, **Nokogiri**, and **SQLITE3**, reducing required man-hours from 40 to 5 per event resulting in an 87.5% efficiency gain
- **Colornote to Joplin** – Developed a migration tool for transferring notes and metadata from ColorNote (a closed-source app without export functionality) to Joplin, an open-source note-taking app, enhancing data portability and empowering users with full control over the ownership of their data.

Education

CUNY - Queens College, Flushing, NY

May 2019

Bachelor of Arts in Mathematics, Minor in Computer Science

Data Structures, Design and Analysis of Algorithms, Algorithmic Problem Solving, Object Oriented Programming (OOP), Computation Theory, Advanced C++, Cryptography, AI with IBM Watson, Statistics, Graph Theory, Set Theory and Logic, Linear Programming and Game Theory, Non-Euclidean Geometry

Languages

English (Native or bilingual proficiency), **Polish** (Native or bilingual proficiency)