Thomas Raczkowski

EDUCATION

Queens College, CUNY Flushing, NY

Bachelor of Arts in Mathematics, Minor: Computer Science

May 2019

Relevant coursework: IBM Artificial Intelligence in CP&IP, Advanced C++ Programming, OOP in Java, Algorithmic Problem Solving, Design and Analysis of Algorithms, Theory of Computation, Cryptography, Linear Programming and Game Theory, Methods of Mathematical Statistics, Set Theory and Logic (graduate level course), Foundations of Geometry (graduate level course), Theory of Graphs (graduate level course).

TECHNICAL SKILLS

Programming: Ruby (Nokogiri, Mechanize, SQLite3), Python (Numpy, Pandas, Matplotlib, Seaborn, Scikit-learn), Octave/MATLAB, Java, C++, HTML, CSS, Javascript (Electron), Mathematica.

Technologies: Linux, Git/Github, SQLite3, Linux Shell Scripting, React, NodeRed, IBM Watson Knowledge Studio, IBM Watson Discovery, IBM Watson Assistant, Mural, Slack & Slack APIs, Telegram & Telegram APIs.

RELEVANT EXPERIENCE

The City College of New York NYC, NY

Undergraduate Researcher

Jan 2019 - May 2019

- Integrated Watson Knowledge Studio, Watson Discovery, Watson Assistant, Telegram, and Slack to build a complete app delivering intelligent, machine learning conversational solutions on multiple platforms to polyethylene plant managers geared toward increasing safety and decrease work related accidents in chemical plants.
- Worked as the back-end developer with a diverse team of Chemical Engineers, Electrical Engineers, and Software
 Engineers, clearly communicating the possibilities and limitations of our development stack to develop business
 solutions for the Petrochemical industry.
- Helped plan and achieve business goals according to AGILE practices.

Big Apple Dancesport Challenge NYC, NY

Registrar

Sep 2018 – Dec 2018

- Resolved technical issues users experienced during the registration process for 1000 competitors.
- Automated data migration process from online website to local spreadsheet resulting in a more efficient system and significant time savings for all subsequent registrars using Ruby and SQLITE3.

Our Lady of Consolation RCC Brooklyn, NY

Music Director

Apr 2013 – present

- Helped implement technology solutions that improved congregation participation and decreased paper waste.
- Organized and performed music for a congregation of 700 people on a weekly basis.
- Led an adult and children's choir making heavy use of leadership and conflict resolution skills.

OTHER PROGRAMMING EXPERIENCE

- Created domain specific Firefox and Chrome plugins that remind user to stop procrastinating every 15 minutes.
- Automated the insertion of Russian stress marks into an Anki library using Ruby and Mechanize.
- Utilized youtube-dl and Linux scripting to bind key combinations to download YouTube videos from a link in Linux.
- Used Mathematica and Meshlab to design and print a 3d model of 5 concentric spheres independently rotating around different axes.
- Implemented basic data structures (queue, linked list, stack, heap, hash, binary trees) in Java.