Maksym Kornyev

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EDUCATION

- **Carnegie Mellon University** — Pittsburgh, PA
  Bachelor of Science in Information Systems — GPA: 3.67 — Dean's List, High Honors — May 2021
  78th William Lowell Putnam Mathematical Competition participant.

PROGRAMMING SKILLS

Languages: Python, Ruby, C, SQL, HTML, CSS, Solidity, CoBOL
Technical Skills: Rails, Git, Unix, MongoDB/PyMongo, Redis, Matplotlib, PostgreSQL, RStudio, Vertabelo
In Progress: Smart Contracts/Cryptographic Constructions
Other: Russian(fluent), Relational Database Development, TDD, Adobe Photoshop, Paint.NET

PROJECTS & COURSEWORK

- **Application Design, Coursework**: Built an online marketplace using the Rails framework with implemented authentication, login, and authorization features. Worked with an MVC architecture and gained a deeper understanding of HTTP routing, design, record management, and API serialization. *Spring 2019*
- **Data Structures, Coursework**: Implemented the Huffman bit-packing algorithm using weighted frequency trees, with the final program having the functionality of 7Zip. Also replicated a low-level virtual machine for C-based memory management. *Fall 2018*
- **Database Design, Project**: Created a normalized transaction/user store for use in Postgres. Modeled the project after a Venmo architecture and fulfilled payment, deposit, and user functions using SQL & Python scripts. *Dec 2018*
- **PyMusic, Project (Find me on Youtube!)**: Built a learning software capable of scanning and playing sheet music. Used Numpy & OpenCV edge detection to find notes on an image. Also used PyAudio & Thread for well-timed audio effects, all packed into a Python-motivated TkInter GUI. Delivered new UX features including accidentals, instruments, and play speeds. *April 2018 - Present*
- **Hack112, Competition**: Developed an audio response tool triggered by music & microphone input in an event loop. Used Pyaudio & Numpy libraries to parse and find audio thresholds for the program. This team contribution was implemented as part of a simple clicking game with a sound component. *April 2018*

PROFESSIONAL & LEADERSHIP EXPERIENCE

- **World Leaders Database Project** — Carnegie Mellon University IPS
  Research Assistant — *Jan 2019 - Present*
  - Helped code & maintain research data spanning 50,000 attributes over several hundred world leaders.

- **Office of New York State Assemblyman Brian Barnwell** — AD 30, Queens, NY
  Research and Data Unit Lead — Senior Intern — *May - Aug 2018*
  - Carried out the campaign-wide tracking of KPI's: made weekly recommendations to refocus canvassing teams to more active turfs, and realized a 3% average gain in success rate for our most active districts.
  - Coordinated and worked closely with a team of 5 interns to create demography reports using official constituent datasets. Also used a DoB database to review tax records for office audit purposes.
  - Worked extensively with non-English speaking constituents & the elderly, and carried out liaison work, turf canvassing, and cold-call/tabling outreach in New York State's 30th Assembly district.

- **Other:**

  Scrutinized management of my personal savings portfolio (Robinhood).
  First chair trumpet in CMUs All University Orchestra, Tartan Wind Ensemble, Pep Band, and Kiltie Marching Band. Also a soloist for an S&S Orchestra Production. *2017-18.*
  Volunteer with Kiwanis International, Camp Invention, and Long Island Alzheimer's Foundation. *2014-17.*
  Waiter, PW Yacht Club. Familiar with catering management and industry standard Aloha POS Systems.