Martin Ristovski

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EDUCATION

2019 – 2023   **Columbia University** – *New York, NY*
BA, Computer Science – GPA: 3.63
Relevant Classes: Discrete Mathematics, Analysis of Algorithms, Artificial Intelligence, Natural Language Processing, Parallel Functional Programming, Advanced Software Engineering, Introduction to Databases

EXPERIENCE

Kensho Technologies - Software Engineer, Core Infrastructure   JUL 2023 – PRESENT

- Implemented organization-wide Privileged Access Management to improve the auditability of interactions requiring elevated permissions
- Spearheaded the migration of our Python projects and libraries to UV, implementing new features in our CI system and creating instructional material in the form of a talk and documentation, resulting in a multiple order of magnitude speed-up in dependency resolution times and Python installation times
- Developed multi-region fallback system for our secret store, improving reliability and allowing for zero-downtime upgrades
- Automated monthly AMI upgrades, from image querying to progressive Kubernetes node cordoning
- Developed tooling for automated Python version upgrades of internal projects, covering syntax changes, Dockerfile adjustments, and dependency constraint updates

Columbia University - Teaching Assistant, COMS W4705 Natural Language Processing   JAN 2023 – MAY 2023

- Held weekly office hours for Columbia's graduate and advanced undergraduate Natural Language Processing class with Prof. Daniel Bauer
- Provided guidance and addressed student questions to foster a deeper understanding of the class material

BetterMeet - Software Engineering Intern   MAY 2022 – AUG 2022

- Built backend and API for meeting analytics browser extension that hooks into Google Calendar and Google Meet
- Implemented event tagging system, setting the groundwork for the product's core value proposition
- Included direct user feedback in analytics by implementing post-meeting survey screen and data gathering
- Set up build system and handled cloud deployment of the backend

Managirr - Software Engineering Intern   JAN 2022 – MAY 2022

- Optimized business logic performance by eliminating duplicate computation and minimizing the number of external API calls
- Implemented personal user file and template file storage by developing an AWS S3-based user file storage system
- Enabled users to get long-term financial insights into their portfolio by designing and building financial data screen

Hypefive - Software Engineering Intern   JUN 2021 – AUG 2021

- Built parts of frontend for cross-platform mobile app using Flutter
- Redesigned APIs for improved performance and maintainability relative to existing API approach
- Accelerated testing by setting up a build system for the core product

Columbia University - Research Assistant   JUN 2020 – AUG 2020

- Worked under Professor Georgia Karagiorgi on neutrino research as part of the High Energy Physics group at Columbia
- Analyzed data gathered by Fermilab's MicroBooNE detector and CERN's ProtoDUNE detector using CERN's ROOT C++ framework
- Optimized clustering algorithm implementation for finding Michel electrons in muon decay events
- Wrote code for real-time neutrino detection at the Deep Underground Neutrino Experiment, an 800 mile long detector with a data throughput rate on the order of terabytes per second

AWARDS AND RECOGNITION

Dean's List - given in recognition of high GPA at Columbia University

John Jay Scholar - given to 30 members of each incoming class of Columbia College for outstanding intellectual ability and leadership

International Physics Olympiad (2017, 2018, 2019) - represented my home country at the world's most prestigious physics competition

European Physics Olympiad (2017, 2018) - represented my home country at Europe's most prestigious physics competition

PROJECTS

Trustfall Dockerfile Adapter - adapter for the Trustfall universal query engine that allows users to write queries about Dockerfiles (Rust)

L'Books - second-hand book marketplace with seller reputation and advanced filtering (Ruby on Rails, PostgreSQL)

Course Registration Platform - improvement upon Columbia's in-house system for handling high-demand classes (Python, Flask)

SKILLS

LANGUAGES   Python, Jsonnet, SQL, Bash, Rust, Java, C, LaTeX
TOOLS   AWS, Docker, Git, Grafana, Kubernetes, Linux, OpenSearch, PostgreSQL, Prometheus, Terraform