

# Martin Ristovski

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 [github.com/martinristovski](https://github.com/martinristovski)

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## EDUCATION

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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

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**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 cordonning
- 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

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**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

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**Testudos** - A parallelized multi-version testing harness for Python packages. (Python) - [pypi.org/p/testudos](https://pypi.org/p/testudos)

**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)

## SKILLS

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**LANGUAGES** Python, Jsonnet, SQL, Bash, Rust, Java, C, LaTeX

**TOOLS** AWS, Docker, Git, Grafana, Kubernetes, Linux, OpenSearch, PostgreSQL, Prometheus, Terraform