# Mihhail Sorokin

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#### EDUCATION

# MEng Mathematics and Computer Science

Oct 2020 – Jul 2024 (exp.)

Imperial College London

London, England

- First Class Honours (expected and on-track)
- President's Undergraduate Scholarship
- Relevant modules: Deep Learning, Maths for Machine Learning, Computational Finance

A-levels
Canford School
Sep 2018 – Jul 2020
Dorset, England

Canford School
• A\*A\*A\*A\*: Maths, Further Maths, Computer Science, Economics, Physics

• Academic Scholarship

#### EXPERIENCE

## Quantitative Developer Intern

Apr 2023 – Sep 2023

Squarepoint Capital

London, England

- Increased adoption of an internal service by investigating and remedying existing users' pain points
- Load tested service to analyse performance issues caused by improper Knative scaling, leading to a doubling of the stable request throughput
- Used time series forecasting methods to predict periods of increased system load

# Undergraduate Teaching Assistant

Oct 2021 – Mar 2024

Imperial College London

London, England

- Tutored a group of first-year students, including feedback, marking, and running programming tutorials
- Assisted first-year Computing students with 1 on 1 on-demand help during supervised lab sessions

### Software Developer

Jul 2021 - Oct 2021

Defence Logic

St. Helier, Jersey

- Developed a client-server application with forensic logging to manage registered hosts via a remote server
- Created a server which supported concurrent communication via gRPC and immutable blockchain logging

# Projects

## Miscellaneous Machine Learning Models | Python, PyTorch

Oct 2023 – May 2024

- Implemented various models from scratch as part of university modules
- Linear regression, decision tree, U-Net, VAE, GAN, Gaussian process, diffusion

#### Extreme Startup | Python, Flask, JavaScript, MongoDB, Docker

Oct 2022 – Dec 2022

- Full-stack web app game used to teach beginner software developers about TDD, CI/CD, and agile methods
- Used in Deutsche Bank, Carnegie Mellon University, Imperial College London

#### MmmmBoxes | Python, Flask, JavaScript, PostgreSQL

Mar 2022 – Jun 2022

- Full-stack web app to assist concierges with mail management in shared accommodation
- OCR parcel label scanning, automated and customisable reminder emails, with a focus on human-centered design

### WACC | Kotlin

Jan 2022 – Mar 2022

• Compiler for a static, strongly-typed language including stack/heap memory allocation, user input, and functions

#### $Pintos \mid C$

Oct 2021 – Nov 2021

• Extension to an educational x86 OS, featuring scheduler thread synchronisation and user space programs

#### ARM11 Assembler and Emulator $\mid C$

May 2021 - Jun 2021

• Assembler and emulator, supporting a subset of the ARM11 instruction set

# TECHNICAL SKILLS & OTHER

Languages: Python (NumPy, PyTorch)

Developer Tools: Git, GNU/Linux, Docker

Familiar With: Kubernetes, Knative, Elastic Stack, Grafana, MongoDB, PostgreSQL, GitLab CI

Spoken Languages: English (native), Russian (native), German (basic)

Interests: chess, motorcycling, snowboarding