Konstantin Grigorov

Principal Software Engineer

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kolygri.github.io/

Summary

I have 5 years of professional experience in the technology field, and before that, I have obtained an MEng degree in Computer Science. I have worked for both small startups, and I have worked for Fortune 500 companies. Hence, I can fit in a well-defined corporate structure and adapt to a flat hierarchy. Sense of ownership, collaboration and cutting edge technology inspires me.

Work experience

Principal Software Engineer / Trading212

04/2021 - Present

London, United Kingdom

- Introducing and improving features on the main backend Java platform.
- Architect of the **Python** algorithmic trading platform.
- Collaborating with quantitative researchers and the risk team to implement models executing buy/sell orders for ~17k instruments.
- Scaling and improving the authentication flow granting access for ~40k daily active users.
- Responsible for collecting and parsing business reports.

Sr. Associate Cloud Native Software Engineer / JPMorgan Chase & Co.

01/2020 - 04/2021

London, United Kingdom

- Contributed to one of the largest **Python** codebases, the JPMC **Athena trading platform**.
- Developed a custom **Kubernetes operator** to manage the life-cycle of the platform job-scheduler.
- Worked on an IaC solution while migrating the risk service to AWS.
- Provisioned a proprietary globally replicated object-oriented database.
- Provided worldwide **first-line** support for the platform.

Software Engineer, Algorithms / Playtech

01/2018 - 12/2019

London, United Kingdom

- Designed and delivered a new FastAPI Margining microservice conforming with the company-wide initiative of adopting UCDP (Unified Continuous Delivery Pipeline).
- Configured a Kubernetes cluster and deployed a dockerised FastAPI application on it.
- Implemented numerous sports betting markets together with their pricing functions in Python and NumPy.
- Redefined parts of the ice hockey model architecture after discovering a bug affecting all overtime markers.
- Improved the time performance of the baseball model by 20%, done in Cython by reducing the number of L2 cache refreshes caused by sparse matrix multiplications.
- Completed more than **100** customer requests with varying severity in out-of-hours time.

Full-stack developer, Lottery / Playtech

07/2017 - 01/2018

London, United Kingdom

- Implemented a barcode detection algorithm in **Python** and **OpenCV** for the **Android** terminals. Automated the barcode scanning by utilising the Google Barcode API.
- Migrated the legacy SFTP server on Amazon EC2. Due to a major non-functional requirement, the facade pattern had to be adopted to simplify the environment configuration setup.
- Completed the messaging system between the admin panel and the client terminals. The frontend styling was done in JQuery, whereas the data assets were being stored in an **Oracle database**.
- Constructed SQL queries requested by customers and extended the reporting functionality of the admin panel.

Software Engineer, Graduate Program / The Hut Group

09/2016 - 05/2017

Northwich, United Kingdom

Created an AngularJS user interface together with Java backend support for the pricing service used by trading managers. Was actively involved in the requirements gathering and refinement.

Systems Engineer, Internship / Cisco

06/2015 - 09/2015

London, United Kingdom

Researched existing and potential customers, in order to support the work of senior account managers. Delivered the valuable insights in the form of presentations.

Education

MEng Computer Science

09/2011 - 07/2016

The University of Manchester

Grade: High 2.1

Achievements

In the top 6% of StackOverflow for 2021 Q4

SAS® Enterprise Guide & Enterprise Miner, Data Analytics for Business Decision Making Certificate

UoM first-year project 2011, "Most Interesting First Year Project"

International Physics Olympiad (IPho) 2010, National Qualification Round