# **CHRIS ROSS**

## SENIOR SOFTWARE DEVELOPER

## PROFILE

Senior software developer with significant finance experience. Strong interest in quantitative modelling and risk analysis. Well versed in modern tech stacks, and a proven ability to lead large scale software projects. Academic background in Computer Science.

## CONTACT

London, UK

chrislandonross@gmail.com

- in <u>linkedin.com/in/chrislross</u>
- hristross.com
- github.com/fightingsleep

## EDUCATION

Bachelor of Science Honours Computer Science University of Saskatchewan Awarded High Honours

## WORK EXPERIENCE

#### **RBC Capital Markets, Senior Software Developer** MAR 2023 - PRESENT

- Developing a cloud-based analytics platform
- Strong focus on counterparty risk and XVA calcs
- Python, C++, Docker, Kubernetes, AKS, Argo
- Containerizing existing modelling library, and migrating projects to Linux
- Replacing existing proprietary workflow infrastructure with Argo Workflows
- Speeding up Monte Carlo simulations using dynamic scaling in the cloud
- Helping setup cloud-agnostic infrastructure to allow switching between Azure, AWS, and on-prem
- Increasing developer productivity through the introduction of dev containers

#### FINBOURNE Technology, Engineer

AUG 2021 - FEB 2023

- Developed a cloud-based investment data management platform
- C# (.NET 6), Python, SQLite
- Modern tech stack: Docker, Kubernetes, AWS, Microservices, Rest APIs, Swagger, etc
- Maintained all open-source SDKs and tools
- Managed a small team of junior software developers
- Implemented connections to Bloomberg, and various other market data vendors
- Designed and implemented a marketplace for purchasing additional integrations to third-party services
- Created CI/CD pipelines (Concourse) and automated testing infrastructure
- Helped build out a new data-virtualization product

## SKILLS

- See my GitHub for stuff that I've been working on: <u>github.com/fightingsleep</u>
- Language agnostic.
  Familiar with most major programming languages
- Finance and quant modelling
- Docker, Kubernetes, AWS, CI/CD (Concourse), Git
- Unit & integration testing (pytest, NUnit, moq)

# PERSONAL PROJECTS

Stock Price Path Brownian Motion Simulation (Web)

• <u>bit.ly/46cF1jZ</u>

Purchasing Power Parity Salary Converter (Web)

• bit.ly/3Xa55bf

Vasicek Interest Rate Model Simulation (Web)

• <u>bit.ly/42GId49</u>

Simple Binomial Option Pricing Model (C++)

• <u>bit.ly/3p1SSsF</u>

Simple Monte Carlo Option Pricing Model (C++)

• <u>bit.ly/44339Ui</u>

Simple Black Scholes Calculator (Python)

• <u>bit.ly/3NaEvdv</u>

## TD Bank, Senior Software Developer

MAR 2018 - JULY 2021

- Quantitative modelling team in the treasury department
- Worked on a financial modelling platform that is responsible for valuation, risk analysis, and hedging of the bank's assets and liabilities
- Lead several new software projects, and also performed mass refactoring/modernization of the treasury modelling library
- Programmed primarily in C# and C++, but also a bit of Python
- Created .NET Core applications that run on both Windows and Linux (in containers)
- Gained experience working with microservices, Docker, NServiceBus, RabbitMQ, and Kubernetes
- Used Microsoft SQL Server and MongoDB
- Used Git for version control, and Jira, Confluence, Bitbucket, Sourcetree for coordination & productivity
- Used CI/CD tools like Jenkins

## **Dell,** Software Engineer II

SEPT 2015 - SEP 2017

- Worked in the data protection division
- Developed data-center backup & recovery software
- Programmed in C / C++ / C# on Windows and Linux
- Worked closely with database management systems like Microsoft SQL Server.
- Gained experience writing highly optimized and concurrent code that was responsible for processing petabytes of data