# Andreas Hadjiantoni

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## **EDUCATION**

### **IMPERIAL COLLEGE LONDON**

MSc in Machine Learning & Al 2019-20 | London, UK Merit

#### UNIVERSITY OF BRISTOL

BSC IN COMPUTER SCIENCE 2016-19 | Bristol, UK First Class

# SKILLS

### **PROGRAMMING LANGUAGES:**

Proficient in:

C • C++11/14 • Pvthon

Familiar with:

Haskell • Scala • Java • SQL

#### **TOOLS AND FRAMEWORKS:**

Git • PyTorch • TensorFlow • GPflow • MPI • Mayen • sbt

#### **PLATFORMS:**

Linux (Debian Derivatives) • Windows

### **LANGUAGES:**

Greek(Native) • English(Proficient)

# **EXPERIENCE**

# **BANK OF AMERICA** JUNIOR QUANT DEVELOPER

April 2021 - Now | London, UK

- Worked as a Python Quant Dev in the Counterparty Credit Risk Team.
- Currently building a time series database retriever tool.
- The tool extracts metrics from an object database, and compiles them in a single pandas-like table.
- It uses parallelization by utilising resources from a grid of nodes.

# MILITARY SERVICE SOLDIER July 2014 – July 2016 | Zigi, Cyprus

- Served in the Special Forces Group.
- Managed a gun storage that required diligence.
- Selected to train and lead a group of recruits.

### **PROJECTS**

# RANDOM VARIATIONAL FOURIER FEATURES FOR GAUSSIAN PROCESSES IN PYTHON (MSC THESIS):

 Researched methods to efficiently scale Gaussian Process inference to multiple dimensions.

### **CLOUD MONITOR SOFTWARE IN SCALA (GROUP PROJECT):**

- Task was to monitor the resources used by a dynamic set of nodes.
- Developed for the governmental organization APHA.
- My part involved implementing the server which interacted with the nodes via an API and with the client using http requests. The API and Client were developed by other people in the group.
- Used Agile software development methodologies throughout.
- Used **Oracle cloud** to spawn Virtual Machines which simulated the nodes during development.
- Used principles and design patterns of object orientation and functional programming.

# PERFORMANCE ENHANCEMENT OF A STENCIL PROGRAM IN C: Github Repo

- Task was to reduce the running time of a program that ran on a supercomputer.
- Vectorization, cache-exploitation, profiling, MPI for multiple thread usage are some of the techniques/software used.

#### COMPILE TIME SUDOKU SOLVER IN C++14:

- Built a tool that uses the backtracking algorithm to solve sudokus.
- The solution is computed at compile time using constexpr.

#### GAME OF LIFE MULTITHREADED IMPLEMENTATION IN C++11:

- Implemented an engine that evolves a 2D grid of binary pixels, according to Conway's game of Life rules.
- Used multithreading and synchronization primitives (with RAII).

### RASTERIZER IN C++11: Github Repo

- Built a basic rasterizer as a university coursework.
- Experimented with templates, classes, and other C++ features.

#### PARTY FINDER ANDROID APP IN SCALA & JAVA:

- The app helps people find other people, that are interested to meet for a game.
- Developed the server backend which interacted with the android app via http requests and websockets.
- Knowledge of functional programming, OOP techniques and android development were enhanced.

# **ACHIEVEMENTS & INTERESTS**

#### **ACHIEVEMENTS**

- 2016 Awarded a scholarship from the government of Cyprus.
- 2014 Marched in the high school's front squad, an honor bestowed upon the top 11 final year students.
- 2011-13 Distinction in the annual regional Mathematics Olympiads.
  - 2009 Distinction in the annual regional Physics Olympiad.

#### **INTERESTS**

RC Drone and RC plane building/flying and weight training.