# William Grimes

- Data scientist with experience in imaging, text-mining, and geospatial data
- PhD in Bioinformatics and Computational Biology from University College London
- Six years experience programming in Python for signal processing and bioinformatics

#### **SKILLS**

**Machine learning:** Regression, decision trees, ensembles, SVMs, neural networks, and deep learning

**Programming:** Python, SQL, R, Matlab, Java

**Data science:** NumPy, matplotlib, pandas, SciPy, scikit-learn, scikit-image, OpenCV, Keras, theano

Other technical: Git, AWS, LATEX, Office, BASH

#### **EXPERIENCE**

#### Data Science for Social Good, Lisbon - Fellowship Programme

Jun 2017 - Present

- Designed and programmed a pipeline using vessel data to predict the likelyhood of illegal fishing
- Collaborated with the World Economic Forum, IBM, Chicago University, and data providers

### London Fire Brigade, London - Data Science Consultant

Jan 2017 - Jun 2017

- Implemented and evaluated three topic modelling methods to classify 37,000 fire incident reports
- Revealed incidents not systematically recorded in categorical data, specifically ducting fires

#### ASI Data Science, London - Fellowship Programme

Jan 2017 - Jun 2017

- Enhanced commercial awareness and business skills including communication, negotiation, and project management
- Completed 50 hrs training in machine learning, databases, statistics, and relevant technologies

#### Laboratory for Molecular Cell Biology, London - PhD Student

Apr 2015 - Nov 2016

- ullet Applied machine learning techniques to identify cell phenotypes with a detection accuracy of 82%
- $\bullet$  Trained Haar-like features model to track leukocytes in endothelial adhesion assays, with a tracking accuracy of 92%
- Co-authored journal articles in Nature Scientific Reports and Journal of Thrombosis and Haemostasis

#### **A\*STAR Bioinformatics Institute**, Singapore - Research Attachment Programme

Sep 2013 - Apr 2015

- Built an image processing pipeline for segmentation of endothelial cells and their organelles
- Employed the workflow to analyse over 40 separate high-throughput confocal imaging studies

### National Institute of Informatics, Tokyo - International Internship Programme

Jun 2013 - Sep 2013

• Created a Java plugin to aid geneticists in identifying and classifying phenotypes in  $\mu$ CT images of mouse embryos, which reduced the image classification and annotation time by 95%

## **EDUCATION**

#### PhD in Computational Biology - University College London

Sep 2013 - Nov 2016

Thesis: Image processing and analysis methods in quantitative endothelial cell biology

## MSc in Computer Science - University College London

Sep 2012 - Sep 2013

Awarded Aardvark Scholarship 2012

**BSc in Natural Sciences** - Durham University

Sep 2009 - Sep 2012

#### **INTERESTS**

Artificial intelligence, blockchain, cryptography, Vipassana meditation, travel, and photography.