Musashi Jacobs-Harukawa | CV

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Employment

Research and Academia

Research Assistant — **Oxford, UK**
Department of Politics and International Relations, University of Oxford *Feb 2020 to Mar 2020*
Provided literature summary of manual and automatic text classification methods.

Research Assistant — **Oxford, UK**
Nuffield College, University of Oxford *May 2019 to Jun 2019*
Developed fuzzy string matching algorithm for merging public records containing typos.

Data Science

Data Scientist — **London, UK**
Political Campaigning Consultancy *Dec 2019, ongoing*
In-house data scientist providing analytics and data visuals.

Quant Developer/Data Scientist — **Tokyo, Japan**
SBI Group, BITS, Japannext and Alpha *Apr 2017 to Sep 2018*
Lead researcher at Equities and Derivatives Exchange at SBI Japannext.

Teaching

Introduction to Python for Social Science — **Oxford, UK**
Course Designer and Instructor *Jan 2020, ongoing*
Slides and materials available at: muhark.github.io/dpir-intro-python

Introduction to Statistics — **Oxford, UK**
Graduate Teaching Assistant, Oxford Internet Institute *Oct 2019 to Dec 2019*

EFL Teacher — **Tokyo, Japan**
IEC Nichibei *Mar 2016 to Mar 2017*

Teacher Intern — **Moscow, Russia**
Language Link *Aug 2015 to Jan 2016*

Grants and Awards

Graduate Research Grant
Merton College, University of Oxford *Oct 2020*
Research grant of £1,500 secured to conduct survey experiment in the United States.

DPIR Studentship
Department of Politics and International Relations *Oct 2019, ongoing*
Fully-funded studentship covering tuition and stipend for duration of three years of doctoral studies.

Exhibitionership
Merton College, University of Oxford *Oct 2013*
Academic and financial award for high achievement in Preliminary Examinations.

Education

DPhil in Politics
University of Oxford, Supervisor: Prof. Andrew Eggers   *2019, ongoing*
Thesis on micro-targeted political advertising and measurement strategies for high-dimensional data.

MSc Politics Research
University of Oxford, Supervisor: Prof. Andrew Eggers   *2018-2019*

BA (Hons) Philosophy Politics & Economics
Merton College, University of Oxford   *2012-2015*
Focus on Quantitative Political Science, Microeconomic Theory, and Game Theory.

Technical Skills

Programming
(*Items limited to those with production-grade implementation experience.*)
- *Languages*: Python, R, bash, SQL, php.
- *Roles*: Data Science Lead, Full Stack Developer, Data Infrastructure Admin
- *Skills*: CI with GitHub, Systems Programming with Linux, Cloud Server Development and Deployment (AWS), Web Development on Nginx/MariaDB.

Statistics
- *Econometric Modelling*: GLM for Cross-Sectional, Time-Series and Panel Data
- *Causal Inference*: Survey Experiments, RDD, DiD, IV
- *Other Specializations*: Information Theory and Bayesian Statistics

Machine Learning
- *Clustering*: k-means, Hierarchical, Spectral and Clustering Metrics
- *Tree-based Methods*: Random Forest, Boosted Trees, BART
- *Decomposition*: PCA, t-SNE, UMAP
- *Model Diagnostics*: Hyperparameter Tuning, Fit Statistics, Algorithm Optimization.

Natural Language Processing
- *Text Preparation*: Syntactic Parsing, Tokenization
- *Topic Models*: LDA, Bayesian Hierarchical, STM, TopSBM
- *Word Embeddings*: word2vec, doc2vec, GloVE, BERT

Composition
- *Visual*: Advanced Data Visualization (static and interactive), Web Development
- *Text*: Markdown, Microsoft Office, LaTeX, reveal.js, html, css.

Languages
- *Native (C2)*: English
- *Proficient (B2-C1)*: Japanese and Spanish

Research

"Estimating the Micro-Targeting Effect: Evidence from a Survey Experiment during the 2020 U.S. Presidential Election". *WIP*.

"An Unsupervised Text-as-Data Approach to Detecting the Effects of Electoral Constraints on Online Communication Strategies in New Zealand". *Master's Thesis*.