Junhyung Park

updated 16th December, 2023

Education

Nov.2019– **PhD in Machine Learning**, *Empirical Inference Department, Max Planck Institute for Intelligent Systems*, Tübingen, Germany
Supervised by **Krikamol Muandet** and **Bernhard Schölkopf**

Sep.2017 – **MSc in Statistics**, *Seminar für Statistik, Dept. of Mathematics, ETH Zürich*, Switzerland
Aug.2019 Thesis: "Kernel Measures of Conditional Dependence", supervised by **Sara van de Geer**
Brownian Motion and Stochastic Calculus, Fundamentals of Mathematical Statistics, Computational Statistics, Introduction to Machine Learning, etc.

Oct.2015 – **MMath in Mathematics**, *Trinity College, University of Cambridge*, Cambridge, UK
Jun.2016 Commutative Algebra, Functional Analysis, Differential Geometry, Representation Theory, etc.

Oct.2012 – **BA in Mathematics**, *Trinity College, University of Cambridge*, Cambridge, UK
Jun.2015 Galois Theory, Linear Analysis, Differential Geometry, Number Fields, Complex Analysis, etc.

Work Experience

Aug.2023 – **Applied Scientist Intern**, *Amazon Web Services*, Santa Clara, California, US
Dec 2023 supervised by Shiva Kasiviswanathan and Patrick Blöbaum

Sep.2016 – **Junior Researcher in Statistics**, *Caleb ABC*, Seoul, Korea
Jun.2017 Developed data envelopment analysis and logistic regression features on B-Box, a statistics software

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Publications

NeurIPS 2023 Park, J., Buchholz, S., Schölkopf, B. and Muandet, K. A Measure-Theoretic Axiomatisation
Oral (77/12343) of Causality.

Entropy 2023 Laumann, F., Von Kügelgen, J., Park, J., Schölkopf, B. and Barahona, M. Kernel-based Independence Tests for Causal Structure Learning on Functional Data.

Preprint 2023 Dhanakshirur, M., Laumann, F., Park, J. and Barahona, M. A continuous Structural Intervention Distance to compare Causal Graphs.

ALT 2023 Park, J. and Muandet, K. Towards Empirical Process Theory for Vector-Valued Functions: Metric Entropy of Smooth Function Classes.

ICML 2021 Park, J., Shalit, U., Schölkopf, B. and Muandet, K. Conditional Distributional Treatment Effect with Kernel Conditional Mean Embeddings and U-Statistic Regression.

arXiv 2020 Park, J. and Muandet, K. Regularised Least-Squares Regression with Infinite Dimensional Output Space.

NeurIPS 2020 Park, J. and Muandet, K. A Measure-Theoretic Approach to Kernel Conditional Mean Embeddings.

Presentations (I = invited talk, C = contributed talk, P = poster)

Nov 2023, I	Leipzig University, **A Measure-Theoretic Axiomatisation of Causality**
Nov 2023, I	Amazon, **A Measure-Theoretic Axiomatisation of Causality**
Oct 2023, I	Stanford University, USA, **A Measure-Theoretic Axiomatisation of Causality**
Jul 2023, P	European Meeting of Statisticians, Warsaw, Poland, **Towards a Measure-Theoretic Axiomatisation of Causality**
May 2023, C	Colloquium on "Fundamental Challenges in Causality", Grenoble, France, **Towards a Measure-Theoretic Axiomatisation of Causality**
Apr 2023, I	Colloquium on "When Causal Inference meets Statistical Analysis", Paris, France, **Towards a Measure-Theoretic Axiomatisation of Causality**
Apr 2023, C	Workshop on Causal Representation Learning, Tübingen, Germany, **Towards a Measure-Theoretic Axiomatisation of Causality**
Mar 2023, I	CISPA – Helmholtz Center for Information Security, Saarbrücken, Germany, **Towards a Measure-Theoretic Axiomatisation of Causality**
Sep 2022, I	ELISE Theory workshop on machine learning fundamentals, Antibes, France, **Kernel Conditional Mean Embeddings and Empirical Process Theory for Vector-Valued Functions**
Jul 2022, C	Saint Flour Probability Summer School, Saint Flour, France, **Empirical Process Theory for Vector-Valued Functions**
Mar 2022, I	Cornell University, USA, **Distributional Treatment Effects with Kernels**
Jul 2020, I	Petnica Summer Institute Machine Learning (Microsoft, Belgrade), **Kernel Methods in Machine Learning**
Feb 2020, P	Workshop on Functional Inference and Machine Intelligence, Eurecom, Antibes, France, **A Measure-Theoretic Approach to Kernel Conditional Mean Embeddings**

Reviews

ACML	2020, 2021
AoS	2021, 2023
NeurIPS	2021, 2022, 2023
ICLR	2022
AISTATS	2022 (Top 10% of reviewers), 2023
ICML	2022, 2023
Analysis and Applications	2023

Technical Skills

Programming	Python, R, MATLAB
Software	LaTeX

Languages & Additional Activities

Languages	Korean (Mother Tongue), English (Bilingual), French (Intermediate), German (Elementary)
Football	Member of Trinity College 1st Football Team (2012-2016) with captaincy (2013-2014). Member of TV Derendingen 2021–

Other Sports   Badminton, Running, Gym

Music   Piano, grade 8, Associated Board of the Royal Schools of Music, UK