

# Junhyung Park

updated 18<sup>th</sup> April, 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**  
Participated: **ELISE Theory Workshop on Machine Learning Fundamentals, 2022**, Eurecom  
Participated: **Saint Flour Probability Summer School, 2022**  
Participated: **RegML Summer School 2021**, by Lorenzo Rosasco  
Organised: **Machine Learning Summer School, Tübingen, 2020**  
Participated: **Functional Inference and Machine Intelligent workshop, 2020**, Eurecom
- Sep.2017 – **MSc in Statistics**, *Seminar für Statistik, Dept. of Mathematics, ETH*, Zürich, Switzerland
- Aug.2019 Thesis: “Kernel Measures of Conditional Independence”, 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, jointly mentored by Aaditya Ramdas at CMU
- 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

## Publications

- 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.

## Invited/Contributed Talks

- May 2023 Colloquium on “Fundamental Challenges in Causality”, Grenoble, France, **Towards a Measure-Theoretic Axiomatisation of Causality**

- Apr 2023 Colloquium on “When Causal Inference meets Statistical Analysis”, Paris, France, **Towards a Measure-Theoretic Axiomatisation of Causality**
- Apr 2023 Workshop on Causal Representation Learning, Tübingen, Germany, **Towards a Measure-Theoretic Axiomatisation of Causality**
- Mar 2023 CISPA – Helmholtz Center for Information Security, Saarbrücken, Germany, **Towards a Measure-Theoretic Axiomatisation of Causality**
- Sep 2022 ELISE Theory workshop on machine learning fundamentals, Antibes, France, **Kernel Conditional Mean Embeddings and Empirical Process Theory for Vector-Valued Functions**
- Jul 2022 Saint Flour Probability Summer School, Saint Flour, France, **Empirical Process Theory for Vector-Valued Functions**
- Mar 2022 Cornell University (Nathan Kallus), online, **Distributional Treatment Effects with Kernels**
- Jul 2020 Petnica Summer Institute Machine Learning (Microsoft, Belgrade), online, **Kernel Methods in Machine Learning**

## ■ Reviews

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

## ■ Technical Skills

- Programming PYTHON, R, MATLAB
- Software L<sup>A</sup>T<sub>E</sub>X

## ■ Languages & Additional Activities

- Languages Korean (Mother Tongue), English (Bilingual), French (Upper-Intermediate), German (Elementary), Italian (Elementary)
- Football Member of Trinity College 1<sup>st</sup> 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