Tatsuhiro Shimizu

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ACADEMIC EXPERIENCE

Yale University (Yale-Visiting International Student Program), New Haven, CT, U.S.
- The one-year exchange program, August 2022-May 2023
- Computer Science, Data Science, Mathematics

Waseda University, Shinjuku-ku, Tokyo, Japan
- Bachelor of Arts, Major Economics, Minor Software Engineering, GPA 3.94/4.00 (Top 1/863), Expected Graduation March 2024
- Undergraduate Member, Deep Learning Studies in Tadao Hoshino Seminar
- Awards: The Glory of Waseda Scholarship, Okuma Memorial Scholarship (Top 1/863), Dean's Scholar (Top 1/863)

WORK EXPERIENCE

XCat, Minato-ku, Tokyo, Japan, August 2022

Data Scientist Hackathon-type Intern
- Got the 2nd best place out of 12 groups by myself in the Data Science Hackathon where almost all participants except for me were graduate students
- Analyzed the cause of telework on the productivity (evaluation) of the workers by using both Difference in Difference (DID) and Synthetic Control Method (SCM) with R (synth library) and Python
- Presented the result of the causal inference research by using data visualization with matplotlib
- Suggested the A/B test with stratified randomization method as a new function in the working administration system from the consequence of the above causal inference analysis to make the future analysis more credible
- Skill: DID, Synthetic Control Method, A/B testing, Python, pandas, NumPy, Matplotlib, R, synth, Scraping

Waseda University, Shinjuku-ku, Tokyo, Japan, August 2022

Teaching Assistant, Causal Inference class, Masahiro Yoshida
- Created four presentation slides on RCT, DID, RDD, and a midterm exam as a top student in his class
- Skill: RCT, A/B test, DID, RDD, IV, Propensity Score Matching, Synthetic Control Method, Structural Estimation, R

ADK Marketing Solutions, Minato-ku, Tokyo, Japan, September 2021

Data Analyst Intern, Data Solution Unit, Integrated Channel Strategy Center
- Analyzed the market and competitors of selected chain stores using data from a comprehensive consumer survey on the lifestyle, consumer behavior, and media exposure by using factor analysis, R
- Narrowed down advertising target based on the characteristics of the selected chain stores and the differences in customer awareness
- Proposed effective advertising methods for the target audience to increase the number of customers
- Was the youngest participant in the internship
- Skill: Factor Analysis, Data Visualization, R, Python

Mynavi, Chiyoda-ku, Tokyo, Japan, August 2021

Soft Engineer Hackathon-type Intern
- Developed a web application with a group of four people by using HTML, CSS, Javascript, Typescript, and React as frontend programming languages
- Used Firebase for the database and GitHub for source code management
- Most all participants except for me in the internship were graduate students specializing in Computer Science
- Skill: Web Scraping, Git, Google Firebase, HTML, CSS, JavaScript, Typescript, React

EXTRACURRICULAR ACTIVITIES

Signate Data Science Competition, June 2021-Present
- Achieved Intermediate rank by using Gradient Boosting Decision Tree (GBDT) and hyper-parameter tuning

- 5279/65797 Top 8%

Kaggle Data Science Competition, May 2021-Present
- Applied machine learning with real-world data by using R and Python for prediction

AtCoder Competetive Programming, February 2021-Present
- Achieved a brown coder (according to the president of AtCoder, this level is excellent for undergraduates, and is in the top 1-2% on other companies' job sites) by C++

CERTIFICATIONS

Japan Statistical Society Certificate Grade Pre-1 pass with credit, Japan Statistical Society, June 2022
- Skill: Limit Theorems, Asymptotic Theory, Asymptotic Properties, Nonparametric Tests, Markov Chains, Stochastic Processes, Multiple Regression Analysis, Regression Diagnostics, Qualitative Regression, Analysis of Variance, Design of Experiments, Principal Component Analysis, Discriminant Analysis, Cluster Analysis, Time Series Analysis, contingency tables, model selection, Bayesian Statistics, Simulation
- Achieved the second highest level in Statistics with honor

Japan Statistical Society Certificate Grade 2, Japan Statistical Society, February 2022
- Skill: Probability Distribution, Sample Distribution, Estimation, Hypothesis Testing, Chi-square Test, Linear Models

Kendama-do 5th dan, Japan Kendama Association, November 2019
- Achieved the second highest level in Kendama, Japanese traditional playing

SKILLS AND INTERESTS

- **Programming Skills**: Python (for Machine Learning and Scraping), R (for Statistical testing), Perl (for Scraping), C++, HTML, CSS, JavaScript, MySQL, Git, Docker
- **Economics Skills**: Microeconomics, Macroeconomics, Finance, Causal Inference, Industrial Organization
- **Mathematical Skills**: Linear algebra, Calculus, Vector analysis, Complex function, differential equation, Fourier analysis, Laplace transform
- **Interests and methodological tools**: Application of Reinforcement Learning in Robotics, Games, and Policies, Generative Adversarial Network, Application of Deep Learning, Application of Structural modeling in Economics, Causal Inference, Finance

LINKS

- Website: https://ss1.xrea.com/tshimizu.s203.xrea.com/works/index.html (http://shimizu432.html.xdomain.jp/works/index.html)
- GitHub: https://github.com/tatsu432
- AtCoder: https://atcoder.jp/users/Tatsuhiroo
- Signate: https://signate.jp/users/67867
- Kaggle: https://www.kaggle.com/tatsuhiroshimizu