

HAYUN SONG

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EDUCATION

University of Southern California (USC) , Los Angeles, California	Expected 2024
Ph.D. Candidate in Economics (Advisor: Dr. Hashem Pesaran)	
University of Wisconsin, Madison , Madison, Wisconsin	2016
M.S. in Economics	
Boston University , Boston, Massachusetts	2014
M.A. in Economics	
Sungkyunkwan University , Seoul, South Korea	2012
B.A. in Economics & B.A. in Business Administration	

FIELDS OF INTEREST

Econometrics, Applied Econometrics, Labor Economics.

DATA ANALYTIC PROJECTS

LGBT Clinic Data Analysis Sep. 2018

- Conducted data analysis for an LGBT clinic to determine patterns of clinic visits and preferred insurance according to gender orientation.
- Analyzed clinic data and determined that Monday was the most popular day for patients of all ages to visit the clinic and Wednesday was the preferred appointment date for Orange County patients. Found that gay and lesbian individuals were more likely to be insured with Cigna, while bi/pan individuals were less likely to be insured with Health-Net or to be uninsured.
- Provided recommendations to the client on clinic operations based on data analysis, including information on events by region and insurance or manpower recruitment by weekday to ensure smooth clinic operations.

Anti-AgingGames.com Senior Center Cognitive Training Pilot Study Sep. 2018

- Assessed the impact of playing anti-aging games (<https://www.anti-aginggames.com/>) on word and digit memory scores and found that the games improved performance by approximately 1.38 and 0.23 respectively and that scores positively correlated with the number of logins.
- Proposed a new game concept to clients utilizing separated visual and auditory effects for improved transparency in memory enhancement analysis.

Psychology Evaluation of Fotonovela, with Aviroop Ghosal Oct. 2018

- Evaluated the effectiveness of a fotonovela, a type of comic book or graphic novel that originated in Latin America similar to a traditional comic book, but is illustrated with photographs rather than drawings, as an educational tool for teaching information about dementia compared to a standard brochure.
- Conducted regression analysis and found that the fotonovela had a significant positive impact on post-knowledge and follow-up-knowledge test scores for dementia with an increase of 3.467 and 7.980 respectively.

ACADEMIC PAPERS

- Song, Hayun. (2023). *Bayesian Estimation and Inference for high-dimensional multivariate volatility model*, [Manuscript in preparation].
- Song, Hayun. (2023). *Testing Conditional Independence for a Panel Data*, [Manuscript in preparation].
- Lee, Junghyuk and Hayun Song. (2023). *Female Labor Force Participation and Gender Role Attitudes*, [Manuscript in preparation].
- Chae, Dongwook and Hayun Song. (2023). *The Choice of Shadow Education and Student's Learning Enthusiasm*, [Manuscript in preparation].
- Song, Hayun. (2021). *Bayesian Dynamic Factor Augmented Structure Learning: Cross-sectional Dependence for Residuals*, Department of Economics, University of Southern California.
- Song, Hayun. (2018). *Individual Heterogeneity in the Returns to Schooling: Instrumental Variable Quantile Regression*, Department of Economics, University of Southern California.

FELLOWSHIPS, HONORS, AND AWARDS

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| Summer Research Award , Department of Economics, USC
Best 3rd-year paper award with \$5,000 for summer research funding. | Oct. 2021 |
| Summer Research Award , Department of Economics, USC
Best 2nd-year paper award with \$3,500 for summer research funding. | Sep. 2018 |
| Scholarship for Excellence , Sungkyunkwan University
Scholarships for the top 50 students with a 70% reduction in tuition fees in the next semester. | Jul. 2009 |

RESEARCH & TEACHING ASSISTANTSHIPS

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| Research Assistant (Dr. Hashem Pesaran & Dr. Ron Smith), USC | Fall 2021 – Present |
| Teaching Assistant , USC | |
| ECON 318: Introduction to Econometrics (undergraduate) | Summer 2022 |
| ECON 318: Introduction to Econometrics (undergraduate) | Spring 2022 |
| ECON 513: Practice of Econometrics (master's) | Fall 2021 |
| ECON 611: Probability and Statistics for Economists (Ph.D.) | Fall 2018 |
| ECON 401: Mathematical Methods in Economics (undergraduate) | Fall 2018 |
| ECON 305: Intermediate Macroeconomic Theory (undergraduate) | Fall 2017, Spring 2018 |

OTHER INFORMATION

- Military Service:** Corporal, Republic of South Korea Army (ROKA). 2019 – 2020
- Programming Languages and Frameworks:** Python (CuPy, PyTorch), R, STATA, Gauss, Git, LaTeX, MATLAB, MySQL, Microsoft Office.
- Languages:** English (Native Fluency), Japanese (Native Fluency), Korean (Native Fluency).
- Citizenship:** South Korea.