

CONTACT
INFORMATION

youngahn@sas.upenn.edu
<https://bayesiahn.github.io/>

EDUCATION

University of Pennsylvania

Ph.D., Economics, September 2020 –
 (2021–2022: Leave of Absence Due to Military Service in Korea)

University of British Columbia

B.Sc., Mathematics (with Distinction), May 2015 – May 2017.
 B.A., Economics, May 2012 – November 2014.

WORKS IN
PROGRESS

1. **Difference-in-Differences with Latent Group Structures** (with Hiroyuki Kasahara)
Presented in: Labor, Firms, and Macro Reading Group 2023, California Econometrics Conference 2023, CESG 2023*.
 2. **From Bytes to Balance: Technology, Skill Accumulation, and Inequality in Competitive Environments**
Presented in: AASLE 2023*
 3. **Non-Random Exposure to Exogenous Shocks under Equilibrium Responses** (with Francesco Agostinelli)
 4. **Difference-by-Transitions: Theory and Applications**
 5. **Finite Mixture Regression Models for Treatment Effect Parameters with Many Regressors** (with Hiroyuki Kasahara)
Presented in: EcoSta 2021
 6. **Learning How Policymakers Rank**
Presented in: CESG 2019
- (*: Scheduled)

SOFTWARE

1. **groupdid** (with Hiroyuki Kasahara)
 R package for difference-in-differences estimation when parallel trends assumptions do not hold.
 Available at <https://github.com/bayesiahn/groupdid>.
2. **normalregMix** (with Hiroyuki Kasahara and Katsumi Shimotsu)
 R package for estimation of normal mixture regression models and testing the number of components.
 Available at <https://github.com/hkasahar/normalregMix>.
3. **rMSWITCH** (with Hiroyuki Kasahara and Katsumi Shimotsu)
 R package for estimation of Markov regime-switching models and testing the number of regimes.
 Available at <https://github.com/chiyahn/rMSWITCH>.
4. **mixPanel**
 R package for estimation of dynamic linear mixture panel data models.
 Available at <https://github.com/chiyahn/mixPanel>.
5. **SimpleDifferentialOperators.jl** (QuantEcon)
 Julia package for solving differential equations by numerical discretization. I worked on derivation (with Jesse Perla), implementation, documentation, tutorials, and complete examples.
 Available at <https://github.com/quantecon/SimpleDifferentialOperators.jl>.

RESEARCH
EXPERIENCE**Research Assistant**

Department of Economics, University of Pennsylvania
 Supervisor: Andrew Shephard

October 2023 –

Contributor

January 2019 –

	QuantEcon Numerical solutions for heterogenous agent models in macroeconomics.	
	Research Assistant Vancouver School of Economics, University of British Columbia Supervisor: Giovanni Gallipolli	July 2019 – June 2020
	Predoctoral Fellow Vancouver School of Economics, University of British Columbia Supervisor: Jesse Perla	August 2018 – June 2020
	Research Assistant Bank of Canada Supervisor: Heng Chen	June 2017 – July 2018
	Research Assistant Vancouver School of Economics, University of British Columbia Supervisor: Hiroyuki Kasahara	May 2016 – June 2017
	Research Intern Korea Labour & Society Institute	October 2014 – January 2015
TEACHING EXPERIENCE	Guest Lecturer ECON 628 - Topics in Applied Econometrics I (UBC) Lecture on data analysis and auto-differentiation for second-year graduate students.	Janurary 2017 – April 2017
	Teaching Assistant ECON 2310 - Econometric Methods and Models (Penn) Supervisor: Xu Cheng ECON 4320 - Microeconometrics (Penn) Supervisor: Petra Todd ECON 0100 - Introduction to Microeconomics (Penn) Supervisor: Anne Duchene CPSC 303 - Numerical Approximation and Discretization (UBC)	Fall 2023 Spring 2023 Fall 2022 Spring 2017
PRESENTATION	2023: Labor, Firms, and Macro Reading Group, CESG*, Penn*, AASLE*. –2022: CESG, Penn.	
SELECTED GRADUATE COURSEWORK	University of British Columbia Computer Science: convex analysis and optimization. Mathematics: optimal transportation, graduate real analysis I/II, graduate probability theory I/II. Statistics: asymptotic statistics, graduate statistical theory I/II, graduate machine learning theory.	
HONOURS & AWARDS	University of British Columbia Dean's Honour List (x2) NSERC Undergraduate Student Research Awards NSERC Undergraduate Student Research Awards* Graduation with Distinction Financial assistantship for the economics MA program in UBC* (*Offered, but declined for another job offer.)	2015 – 2017 May 2016 May 2017 May 2017 March 2018
	Others Service for the Republic of Korea Army (Sergeant, served in an artillery battalion)	2020 – 2022
SKILLS	Computer programming: C/C++, Julia, MATLAB, Python, R, Stata, shell scripting, multi-cluster computing with MPI, version controls with Git, GNU Make. Foreign languages: Korean (native) Japanese (advanced / certified with JLPT N1; 2022) Mandarin Chinese (advanced / certified with HSK Level 6; 2020) Literary Chinese (intermediate)	