

# Chang Geun Song

October 2021

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## EDUCATION

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Ph.D. Candidate, Economics, Virginia Tech, Blacksburg, VA, USA	Aug. 2016 – May. 2022 (Expected)
M.A., Economics, Virginia Tech, Blacksburg, VA, USA	Aug. 2016 – Feb. 2015
M.A., Economics, Sungkyunkwan University, Seoul, Korea	Mar. 2012 – Feb. 2015
B.A., Economics, Sungkyunkwan University, Seoul, Korea	Mar. 2005 – Feb. 2012

## DISSERTATION COMMITTEE

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**Dr. Nicolaus Tideman**  
Economics Department, Virginia Tech  
[ntideman@vt.edu](mailto:ntideman@vt.edu)

**Dr. Richard Ashley**  
Economics Department, Virginia Tech  
[ashleyr@vt.edu](mailto:ashleyr@vt.edu)

**Dr. Eric Bahel**  
Economics Department, Virginia Tech  
[erbahel@vt.edu](mailto:erbahel@vt.edu)

**Dr. Florenz Plassmann**  
Economics Department, Ohio University  
[plassmann@ohio.edu](mailto:plassmann@ohio.edu)

## RESEARCH AND TEACHING FIELDS

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**Primary field: Public Choice, Empirical Analysis of Voting.**  
**Secondary field: Applied Microeconomics.**

## RESEARCH PAPERS

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### Job Market Paper

*-Estimating the Probability of a Voting Cycle*

Abstract:

Theoretically, Condorcet paradox exists and occurs, but much less in practice than it predicted. This paper targets estimating the probability of the paradox, being closer to what the data tells. Survey data is the best alternative to actual election data under the ranked voting system. We use German Politbarometer, which offers two benefits for empirical analysis of voting systems; containing scoring data and the enormous observation size. We suggest different statistics and models based on cardinality. Specifically, considering a 'median' of collected evaluations as a significant factor in predicting the winner of one-to-one comparison, approximating the probability of a cycle from the probability of two sets of three events occur. The model predicts a significantly lower (but positive) voting cycle frequency than popular models, a probabilistic model with IC and IAC assumptions. Our approach involves 1) assigning three candidates presumed positions of first, second and third 2) noting the gaps between pairs of candidates in apparent estimated merit, and then 3) computing the probability that the three pairwise comparisons will have a combination of outcomes that results in a cycle.

## Research In-Progress

-The Frequency of Cycles and Condorcet Inconsistency with IRV in FairVote and Politbarometer Data  
-Normal Spatial Model with Four Candidates in Three Dimensions: Parameterization and Approximation:  
-Inferring the Network within Korean Congressmembers based on their propositions

(with Dongwoo Lee and Sunjin Kim)

## EXPERIENCE

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### Virginia Tech

#### **Instructor**

Undergraduate level:

*Principles of Economics (Microeconomics)*

Spring 2020, Spring 2021

*Principles of Economics (Macroeconomics)*

Summer 2019

#### **Research Assistant**

“The Frequency of Cycles and Condorcet Inconsistency with IRV in FairVote and Politbarometer Data,”

Dr. Tideman

Summer 2021

#### **Teaching Assistant**

Graduate level:

*Prices and Markets* (Dr. Adam Dominiak)

Spring 2018

Undergraduate level:

*Principles of Economics* (Dr. Steve Trost)

Fall 2016, Spring 2017

*Principles of Economics* (Dr. Gebremeskel Gebremariam)

Fall 2018

*Microeconomic Theory* (Dr. Adam Dominiak)

Fall 2017

*Microeconomic Theory* (Dr. Matt Kovach)

Fall 2018

*Microeconomic Theory* (Dr. Hector Tzavellas)

Fall 2021

### Sungkyunkwan University

#### **Research Assistant**

“Contests with Bilateral Delegation: Unobservable Contracts,” Dr. Kyung Hwan Baik

Sept 2013 - Feb 2015

#### **Teaching Assistant**

Graduate level:

*Microeconomics I* (Dr. Joon Song)

Spring 2014

*Microeconomics II* (Dr. Yong-Gwan Kim)

Fall 2013

Undergraduate level:

*Microeconomics* (Dr. Yong-Gwan Kim)

Spring 2012, Spring 2013, Spring 2014

*Intermediate Microeconomics* (Dr. Joon Song)

Fall 2012, Spring 2013, Fall 2013, Spring 2014, Spring 2015

*Advanced Microeconomic Theory* (Dr. Joon Song)

Fall 2014, Fall 2015

*Mathematical Economics* (Dr. Yong-Gwan Kim)

Fall 2012, Fall 2013

## HONORS & AWARDS

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### Korean Student and Foundation

National Work Study Program Scholarship (2013)

### Sungkyunkwan University

Teaching Assistantship (2012 – 2015)

Simsan Scholarship (2013)

Academic Excellence Scholarship (2011)

Support for Achievement Scholarship (2011)

## MISCELLANEOUS

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Citizenship: South Korea (U.S. Visa Status: F-1)

Languages: English (fluent), Korean (native), Mandarin (basic)

Software: Python