# **Chang Geun SONG**

November 2021

Department of Economics Virginia Tech Blacksburg VA 24061-0316

(540)425-6098 <u>cgsong86@vt.edu</u> <u>https://cgsongv.github.io/</u>

# **EDUCATION**

Ph.D., Economics, Virginia Tech, Blacksburg, VA, USA M.A., Economics, Virginia Tech, Blacksburg, VA, USA

M.A., Economics, Sungkyunkwan University, Seoul, Korea B.A., Economics, Sungkyunkwan University, Seoul, Korea

Aug. 2016 – May 2022 (Expected) Aug. 2016 – Feb. 2015

> Mar. 2012 – Feb. 2015 Mar. 2005 – Feb. 2012

# **DISSERTATION COMMITTEE**

Dr. Nicolaus Tideman

Economics Department, Virginia Tech ntideman@vt.edu

Dr. Eric Bahel

Economics Department, Virginia Tech erbahel@vt.edu

**Dr. Richard Ashley** 

Economics Department, Virginia Tech ashlevr@vt.edu

Dr. Florenz Plassmann

Economics Department, Ohio University plassmann@ohio.edu

# RESEARCH AND TEACHING FIELDS

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

# **RESEARCH PAPERS**

## Job Market Paper

-Estimating the Probability of a Voting Cycle Abstract:

Voting cycles do exist, but much less frequently in practice than is predicted. This paper develops an estimate of the probability of a cycle that closer to what the data reveal. In the absence of an abundance of actual voting data in which voters rank candidates, survey data is the best alternative. We use German Politbarometer data, which offers two benefits for empirical analysis of voting systems; the fact that participants score the candidates and the large number of observations. We develop hypotheses and models based on cardinality. Specifically, we consider a 'median' of collected evaluations as a significant factor in predicting the winner of head-to-head comparisons, estimating the probability of a cycle from the probability of two sets of three events occurring. The model predicts a significantly lower voting cycle frequency than models based on the 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**

# Virginia Tech

# Instructor

Undergraduate level:

Principles of Economics (Microeconomics)

Principles of Economics (Macroeconomics)

Spring 2021, Spring 2020

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:

Microeconomic Theory (Dr. Hector Tzavellas)Fall 2021Microeconomic Theory (Dr. Matt Kovach)Fall 2018Microeconomic Theory (Dr.Gebremeskel Gebremariam)Fall 2018Microeconomic Theory (Dr. Adam Dominiak)Fall 2017

# **Sungkyunkwan University**

#### Research Assistant

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

Sept 2013 - Feb2015

# Teaching Assistant

Graduate level:

Microeconomics I (Dr. Joon Song)Spring 2014Microeconomics II (Dr. Yong-Gwan Kim)Fall 2013

Undergraduate level:

Advanced Microeconomic Theory (Dr. Joon Song)

Fall 2015, Fall 2014

Intermediate Microeconomics (Dr. Joon Song) Spring 2015, Spring 2014, Fall 2013, Spring 2013, Fall 2012

Microeconomics (Dr. Yong-Gwan Kim) Spring 2014, Spring 2013, Spring 2012

Mathematical Economics (Dr. Yong-Gwan Kim) Fall 2013, Fall 2012

# **HONORS & AWARDS**

# **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**

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

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

Experienced with Python: data processing, statistical/optimization program, econometrics techniques.