

University of Minnesota - Twin Cities

Department of Economics
4-101 Hanson Hall
1925 Fourth Street South
Minneapolis, MN 55455
U.S.A.

Placement Directors

Timothy Kehoe
(612) 625-1589
Loukas Karabarbounis
(612) 625-7504
mneconplacdir@umn.edu

Placement Coordinator

Wesley Peterson
(612) 625-6859
mneconjm@umn.edu

**Curriculum Vitae
Fall 2023****ROBERT WINSLOW****Personal Data***Address*

4-101 Hanson Hall
1925 Fourth Street South
Minneapolis, MN 55455

Contact Information

Cell: (913) 707-4116
E-mail: winsl055@umn.edu
URL: rmwinslow.com

Citizenship: US

Major Fields of Concentration

Machine Learning, Macroeconomics

Education

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Economics	University of Minnesota (expected)	2024
BS	Mathematics	University of Kansas	2016

Dissertation

Title: TBD

Dissertation Advisor(s): Professor Fatih Guvenen

Expected Completion: Summer 2024

References

Professor Fatih Guvenen	(612) 625-0767 guvenen@umn.edu	Department of Economics University of Minnesota 4-101 Hanson Hall
Professor Loukas Karbarbounis	(612) 625-7504 loukas@umn.edu	1925 South Fourth Street Minneapolis, Minnesota 55455
Dr. Simran Sahi	sahix001@umn.edu	

Honors and Awards

- 2022 *Winner, 2022 Minnesota Big Data Institute (MEBDI) Machine Learning Competition, University of Minnesota, Minneapolis, Minnesota*
- 2021 - 2023 *Distinguished Instructor, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Received the award three times.*
- 2017 - 2019 *Distinguished Teaching Assistant, Department of Economics, University of Minnesota, Minnesota. Received the award four times.*

Teaching Experience

- Summer 2019 - present *Instructor, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Taught Intermediate Macroeconomics.*
- 2017 - 2019 *Teaching Assistant, Department of Economics, University of Minnesota, Minneapolis, Minnesota. Led recitations for Principles of Microeconomics and Principles of Macroeconomics.*

Research Experience

- Summer 2015 *Math Research Experience for Undergraduates (REU), West Virginia University, Morgantown, West Virginia. Researched combinatorics under the supervision of John Goldwasser and Kevin G Milans.*

Papers

- Almeter, Jordan, Samet Demircan, Andrew Kallmeyer, Kevin G. Milans and R.M. Winslow, "Graph 2-Rankings," *Graphs and Combinatorics* 35 (1), 2019: 91-102. Presented at the 2015 Miami University Annual Mathematics Conference, September 2015. Miami University, Oxford, Ohio.

Computer Skills

Python, JavaScript, Java, C++, QGIS

Languages

English (native)

Abstract(s)

Almeter, Jordan, Samet Demircan, Andrew Kallmeyer, Kevin G. Milans and R.M. Winslow, "Graph 2-Rankings,"

A 2-ranking of a graph G is an ordered partition of the vertices of G into independent sets V_1, \dots, V_t such that for $i < j$, the subgraph of G induced by $V_i \cup V_j$ is a star forest in which each vertex in V_i has degree at most 1. A 2-ranking is intermediate in strength between a star coloring and a distance-2 coloring. The 2-ranking number of G , denoted $\chi_2(G)$, is the minimum number of parts needed for a 2-ranking.

For the d -dimensional cube Q_d , we prove that $\chi_2(Q_d) = d + 1$. As a corollary, we improve the upper bound on the star chromatic number of products of cycles when each cycle has length divisible by 4.

Let $\chi'_2(G) = \chi_2(L(G))$, where $L(G)$ is the line graph of G ; equivalently, $\chi'_2(G)$ is the minimum t such

that there is an ordered partition of $E(G)$ into t matchings M_1, \dots, M_t such that for each j , the matching M_j is induced in the subgraph of G with edge set $M_1 \cup \dots \cup M_j$. We show that $\chi'_2(K_{m,n}) = nH_m$ when $m!$ divides n , where $K_{m,n}$ is the complete bipartite graph with parts of sizes m and n , and H_m is the harmonic sum $1 + \dots + \frac{1}{m}$. We also prove that $\chi_2(G) \leq 7$ when G is subcubic and show the existence of a graph G with maximum degree k and $\chi_2(G) \geq \Omega(k^2/\log(k))$.