# Kristin Vrona

Curriculum Vitae

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#### **EDUCATION**

Ph.D. Economics, Northern Illinois University (NIU) Expected 2025
Dissertation Title: "An Analysis of Mental Health and Labor Productivity"

M.A. Economics, Northern Illinois University 2018
B.S. Economics, summa cum laude, Northern Illinois University 2016

Fields: Health Economics, Labor Economics, Econometrics

#### **EMPLOYMENT**

#### Independent Freelance Contract with Snorkel AI

Nov. 2024 - present

Remote

Field Expert: Econometrics, Labor Economics

- Conducted rigorous evaluation of advanced multiple-choice question responses in economics, employing statistical and econometric methodologies to assess accuracy and reliability
- Designed and implemented analytical frameworks to measure the effectiveness of complex models in interpreting and responding to economic prompts

# Institute for the Study of the Environment, Sustainability, and Energy DeKalb, IL Sponsored by Illinois Department of Natural Resources (IDNR)

Graduate Research Fellow | Primary Grant Reviewer

Aug. 2022 - Aug. 2024

- Consulted IDNR on funding misallocation and improvements to grant evaluation processes
- $\bullet$  Evaluated 150+ grant applications, allocating \$59M in funding, resulting in increased funding to distressed areas by 20%
- Collaborated with colleagues from Environmental Sciences to identify priority districts in need of funding, utilizing GIS and Gini coefficient analysis
- Contributed to building a strategy based on best practice for the Statewide Comprehensive Recreation Plan

# Northern Illinois University, Department of Economics

DeKalb, IL

Teaching Fellow | Undergraduate Academic Advisor

Aug. 2017 - Aug. 2022

- Independently instructed undergraduate macroeconomics courses for 15–38 students, adapting to remote delivery during COVID-19
- Led graduate level recitation sessions on microeconomic theory; graded papers and provided comments
- Represented the Economics Department at university events, promoting the program and recruitment

Kristin Vrona 1 March 2025

# M.O.L. America, INC. (now O.N.E. Line, INC.)

Business Operations Analyst

Lombard, IL May 2016 - July 2017

- Improved cost and quantity forecasting accuracy 5-8% through econometric methods
- Monitored and assessed projection model performance, identified trends, and presented actionable insights to senior management
- Developed and implemented standard operating procedures across multiple departments
- Initiated weekly audits, optimizing asset allocation and enhancing sustainability and cost savings in tandem
- Awarded the MOL Spot Award (June 2017) for successful project management leading to improved processes

# AWARDS, HONORS, & FELLOWSHIPS

2023	IL congressional session (February 28) & gubernatorial press conference (March 1).
	ESE team honored for management of \$59 million in grant funds across IL parks projects.
2022	Dissertation Fellowship, Northern Illinois University.
	Runner-up, awarded tuition-waiver for 2023-2024 academic year.
2018	Outstanding Graduate Student Award, Northern Illinois University Graduate School
	(April).
2017	M.O.L. Spot Award, M.O.L. America, Inc. (June).
	Monetary award for streamlining data processes and developing standard operating proce-
	dures for cross-departmental implementation.
2017	Kellstadt Graduate Scholarship, DePaul University Kellstadt Graduate School of
	Business.
	Declined in favor of offer from Department of Economics at NIU.
2012-2016	Departmental Honors, Department of Economics; Dean's List, College of Liberal

# CAMPUS & DEPARTMENTAL TALKS

Arts & Sciences; Academic Excellence List, NIU

2022	"Labor Productivity and Health", ECON 700: Labor Economics I, NIU Department
	of Economics, November 27
2021	"Moderate to Severe Diagnosed Mental Disorders and Absenteeism", NIU Depart-
	ment of Economics Graduate Colloquium Seminar, March 24
2018	"Mental Health & Labor Supply", NIU Department of Economics Graduate Collo-
	quium Seminar, November 23

# TEACHING EXPERIENCE

# Northern Illinois University (NIU)

Principles of Macroeconomics, undergraduate, Instructor of Record	SU22, SU21, SP21
Intermediate Macroeconomics, undergraduate	SP22
Econometric Analysis, undergraduate	F21
Public Sector Economics, graduate	F20
Microeconomic Analysis, graduate	SP20, F18

Kristin Vrona 2 March 2025

#### ADVANCEMENT & DEVELOPMENT

2024	Retirement Confidence Survey: Results and Insight Webinar, Employee Benefit
	Research Institute (EBRI), June 25
2024	EBRI & American Benefits Council: 2024 Spring Policy Forum, May 16
2024	Collaborative Institutional Training Initiative: Human Subjects Research Training,
	February 22
2023	IDNR & Federal Department of Natural Resources Collaborative Sessions, February
	27-28
2022	The Committee on the Status of Women in the Economics Profession (CSWEP)
	Mentorship Seminar
2020	CSWEP Successfully Navigating Your Economics PhD, November 20
2019	Federal Reserve Bank of Chicago 12th Annual Risk Conference
2019	NIU Department of Economics ECONference, April
2017	NIU Department of Economics ECONference, April 26

#### Certifications

CITI Program Human Subjects Research Training Certification (February 2024 - February 2029)

# DEPARTMENTAL & UNIVERSITY SERVICE

2019	Academic Advisor, Department of Economics, NIU Transfer Student Open House
	Days, October 18 & November 11
2019	Department Representative, Department Organizer, Department of Economics, NIU
	Major and Minors Fair, September 18
2018	Academic Advisor, Department of Economics, NIU Transfer Student Open House
	Days, October 8 & November 12
2018	Academic Advisor, Department of Economics, NIU Transfer Student Open House
	Days, March 30
2018	Department Representative, Co-organizer, Department of Economics, NIU Spring
	Internship and Job Fair, February 20
2017	Assistant Undergraduate Academic Advisor, Department of Economics, Fall 2017.
	Created and updated NIU Department of Economics pamphlets and posters, en-
	couraged students with disabilities to take direct pathways to a degree in economics

# SERVICE TO PROFESSION

2022-2023 *Primary Grant Reviewer*, IDNR Open Space Land Acquisition and Development Program

#### **SKILLS**

#### **Technical Skills**

- Advanced in R, SAS, VBA, LATEX
- Proficient in BI, SQL, Python

#### General Skills

- Innovative problem solving
- Effective collaboration
- Project management & initiative
- Adaptive communication (across audiences, mediums)

# **Econometric Methods**

- Time-Series Analysis, Instrumental Variables, Panel Methods, Regression Discontinuity, Duration & Survival Analysis, Simultaneous Regression
- Matching, Simulation, Bias Reduction & Re-Sampling Techniques (Bootstrap, Jackknife), Sensitivity Analysis

Kristin Vrona 3 March 2025

#### RESEARCH PAPERS

#### Manuscripts in Preparation

#### "Mental Health and Absenteeism: the Role of Fringe Benefits as Moderators"

Abstract: This study examines the impact of mental illness on health-related labor supply decisions, using data from the Medical Expenditure Panel Survey (MEPS) for employed adults in the United States. The analysis explores the effects of both diagnosed mental illness and self-reported mental well-being on health-induced absenteeism, while investigating how job characteristics may amplify or mitigate these effects. To address potential endogeneity between mental health and labor supply, the study employs several empirical strategies, including time-invariant measures of exogenous diagnosis, a correlated random effects approach to account for unobserved individual-specific confounders, and semi-parametric estimators. Employer-sponsored health benefits, while generally associated with higher absenteeism due to labor substitution for health-related needs, are found to mitigate the impact of mental illness on absenteeism.

#### **Working Papers**

# "Labor Supply Dynamics Among Employed Workers with Mental Illness" (Job Market Paper)

Abstract: In this article, the impact of diagnosed mental illness on workplace productivity is examined, focusing on variations between levels of psychological distress and perceived physical health. I also explore the influence that comorbidity of chronic physical and mental illnesses imposes on absenteeism using the Medical Expenditure Panel Survey (MEPS). Key findings reveal sex-based differences: men with mental illness experience a sustained negative effect of psychological distress on absenteeism, while women show a consistent increase in absenteeism as distress intensifies. For both genders, I find that the impact of mental illness is eventually overshadowed by distress-related symptomatology, highlighting the significant role of undiagnosed mental illness in productivity losses.

### Research in Progress

#### "Causal Effect of Mental Health on Employment Duration"

Abstract: I investigate the causal relationship between mental health and labor market transitions, focusing on the dynamics of entry and exit. Using longitudinal data from the 2010–2013 Medical Expenditure Panel Survey, I construct a latent mental health index to model baseline mental health and the state preceding employment transitions. I examine patterns among unemployed individuals entering the workforce, employed individuals exiting employment, and variations in mental health across differing unemployment spell durations. Although my analysis is ongoing, my aim is to provide insight into the interplay between mental health and labor market activity, informing policies that address workforce stability and mental health equity.

#### DISSERTATION COMMITTEE & REFERENCES

#### Dr. Virginia Wilcox,

Committee Chair
Department of Economics
Northern Illinois University
515 Zulauf Hall
DeKalb, IL 60115

Email: vlw@niu.edu

#### Dr. Maria Ponomareva

Department of Economics Northern Illinois University DeKalb, IL 60115

# Dr. Anna Klis

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