

Zach Johnson

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Education

NORTH DAKOTA STATE UNIVERSITY

BS Economics. GPA: 3.83 (Magna Cum Laude)

Fargo, ND

2019-2022

- Quantitative program emphasized mathematical, statistical, and computational applications of economics
- NDSU Presidential scholarship; Mildred Larson Scholarship; Agribusiness and Applied Economics Scholarship; WFEA Scholarship; Challey Institute Scholarship; NDSU Men's Track Scholarship
- Recipient of 3M stipend for research in the Grand Challenge Scholars Program
- Minor: Computer Science

MS Applied Economics

Fargo, ND

2022-2023

- Thesis: Agent-based modelling of heuristic vs neoclassical economic agents
- Built agent based Sugarscape model to analyze how welfare of agents relying on simple heuristics compares to agents employing neoclassical economic techniques for optimizing purchase power
- Coursework in advanced microeconomic theory, linear programming, advanced econometrics (time series)

Experience

BLUE CROSS BLUE SHIELD OF NORTH DAKOTA

Fargo, ND

Data Analytics Intern

Jun 2022 – Aug 2022

- Worked with developers and analysts to provide enterprise data analytics and solutions
- Saved many FTE hours through automation of manual processes using Windows PowerShell scripting
- Analyzed and presented to large committee on statistical similarities and differences between current and prospectively new risk scores to be used in BCBSND's Value-Based Care program
- Created data validation methods to screen for faulty data coming from developing data warehouse using Windows PowerShell
- Spearheaded integration of Python into enterprise use for data science use
- Presented projects to Data Analytics team and other large committees on multiple occasions

NORTH DAKOTA STATE UNIVERSITY

Fargo, ND

Department of Agribusiness and Applied Economics Graduate Research Assistant

2022-2023

- Book chapters: *Probability Distributions*, *Hypothesis Testing for Learn Python for Statistics and Economics*
- Teaching assistant, ECON411: Computational Economics
- Lecture, *hypothesis testing*, ECON411
- Advisor: Dr. Jim Caton

Leadership & Activities

NDSU MENS TRACK AND FIELD/CROSS COUNTRY (Division 1)

- Long-Distance athlete (5000m, 10000m, cross country)
- 3 time all conference (2023 (2), 2020), top 10 in school history in 4 events: 5000m (indoors), 5000m (outdoors), 10000m, 10k (XC)

Skills & Interests

Software: Python(OOP and DS), Java, SQL, PostgreSQL, Excel, PowerShell, Tableau, STATA, GAMS

Applications: statistical modeling, agent-based models, data visualization, data science, computational economics, linear programming, time-series analysis

References or Writing Samples

- Available upon request