Joe Patten

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1590 NE Northwood Dr D101, Pullman, WA 99163

EDUCATION

PhD, Economics — May 2021 (Expected)
Washington State University; GPA: 4.0/4.0 — *Pullman, WA*

- Focuses: Econometrics, Labor Economics, Economics of Education

MS, Computer Science (Focus in Machine Learning) — May 2021 (Expected)
Washington State University; GPA: 4.0/4.0 — *Pullman, WA*

B.S., Exercise Science (Focus in Biomechanics) — 2012
Brigham Young University; GPA: 3.8/4.0; Cum Laude — *Provo, UT*

RELEVANT GRADUATE-LEVEL COURSEWORK

- Statistics for Economists, Econometrics I-IV (OLS, MLE, Bayesian Statistics, Machine and Deep Learning), Statistical Computing
- Machine Learning, Data Science, Artificial Intelligence, Big Data, Advanced Graph Theory, Advanced Algorithms

SKILLS

- **Languages/Tools**: Python, Stata, R, LaTeX, SQL, Git, Excel, Linux
  familiar with Spark (use with big data), JavaScript (D3.js), AWS, Matlab, HTML/CSS, Tableau, C++

WORK EXPERIENCE

WeWork — Jan 2020 - Jun 2020
Research and Applied Science Intern — *Palo Alto, CA*

- Implemented model combining machine learning and econometrics to estimate the downtime of vacant offices that was later used in production
- Designed and administered experiment to estimate revenue-maximizing prices at China WeWork locations

RESEARCH EXPERIENCE

Benjamin Cowan, Washington State University — 2017, 2019
Graduate Research Assistant — *Pullman, WA*

- Build, clean, and run analyses on large datasets (10 million+ observations), high dimensional datasets (1000+ variables), and confidential datasets using Python, R, and Stata
- Devised instrumental variables approach (2-stage least squares) to estimate effects of state spending on college outcomes
- Implemented causal inference techniques to evaluate effects of college openings on labor outcomes in Ethiopia

Jonathan Yoder, Washington State University — 2018 - 2019
Graduate Research Assistant — *Pullman, WA*

- Cleaned and merged multiple waves of Tanzania panel data and African weather data using Python
- Used parametric and nonparametric statistical approaches to examine effects of drought on herd composition in Tanzania

Brent Hickman, University of Chicago — 2014
Undergraduate Research Assistant — *Chicago, IL*

- Assisted in the design and implementation of affirmative action field experiment in Chicago
- Built, cleaned, and analyzed datasets containing students from several schools using Stata and Matlab

Joseph Price, Brigham Young University — 2013-2014
Undergraduate Research Assistant — *Provo, UT*

- Hired and supervised 10 undergraduate students to assist in affirmative action field experiment in Utah
- Implemented various econometric techniques to evaluate topics in Labor and Education Economics using Stata

AWARDS AND ACHIEVEMENTS

- School of Economic Sciences Excellence in Teaching Award, 2019
- Comprehensive Exams Passed: Econometrics (with distinction), Microeconomics (with distinction), and Macroeconomics (with distinction), 2017
- James C. Nelson Fellowship, 2016
- Washington State University Graduate Assistantship, 2016-Present
- BYU Full Academic Scholarship, 2010-2012
- BYU Dean's List, 2009-2010