Daniil Sherstnev

PhD Candidate in Economics | Causal Inference & Experimentation | Data Science
Mobile: +1-323-273-1007 | Email: sherstne@usc.edu | LinkedIn: linkedin

Education

University of Southern California (USC)   Aug 2021 – Present
PhD in Economics

- <u>Research focus</u>: Causal inference, Network analysis, Bayesian modeling

- <u>Coursework</u>: Causal Inference with Advanced ML, High-Dimensional Statistics, Applied Econometrics.

New Economic School (NES), Moscow   Sept 2018 – July 2020
M.A. in Economics, GPA 4.55/5.30

- Ranked **#1** in Data Analysis track and Modern Macroeconomics track.

Moscow Institute of Physics & Technology (MIPT)   Sept 2014 – June 2018
B.S. in Physics, GPA 4.94/5.00

Professional Experience

ByteDance Inc. (San Jose, CA)   May – Aug 2023, 2024, 2025
Research Scientist, PhD Intern, Causal Inference/Ads Experimentation Team

- Developed a **Bayesian winner-declaration methodology** for large-scale A/B testing, improving robustness of experiment decision-making.

- Built an **end-to-end debiasing model** (ML approach similar to IPW) leveraging Click ID; achieved a **7% reduction in CPIC**, helped the team's GA launch and contributed to **$300M in additional company revenue**.

- Collaborated with cross-functional teams to analyze **thousands of experiments covering tens of millions of users each**, directly informing product monetization and ad delivery strategies.

New Economic School, CSDSI (Moscow, Russia)   Mar – Aug 2021
Junior Researcher

- Conducted economic impact analysis of universities using input-output matrices; results summarized into internal and policy-facing reports.

Universitat Pompeu Fabra (Barcelona, Spain)   Nov 2020 – Aug 2021
Research Assistant

- Conducted econometric analysis of IPUMS data using Stata and Wharton's HPC cluster.

- Contributed to research that informed a **published paper on political economy**: SSRN link.

Teaching Experience

University of Southern California (USC)   Aug 2023 – Present
Teaching Assistant
Courses: Economic Consulting & Applied Econometrics (Econ 474/584), Introduction to Statistics for Economists (Econ 317)

- Assisted professors with grading midterms, exams, and assignments for **200+ students**.

- Supported course logistics and clarified concepts during office hours and review sessions.

New Economic School (Moscow, Russia)   2020 – 2021
Teaching Assistant
Courses: Political Economics, Empirical IO, Institutional Economics

- Awarded **Best TA of the Year (2020–21)** for excellence in teaching support.

- Managed grading, coursework preparation, and student guidance for classes of 10–30 students.

Skills

Programming & Tools: Python, R, SQL, Stata, LaTeX, Git
Methods: ML, Deep Learning, Causal inference, A/B testing, Bayesian modeling, Econometrics
Languages: Russian (native), English (fluent), German (beginner)