NICK HAND, PHD

POLICY DIRECTOR DATA SCIENTIST EDUCATOR



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AREAS OF EXPERTISE

- More than a decade of Python experience with extensive knowledge of the modern data science toolkit
- Frontend data visualization: Javascript, Typescript, HTML, CSS, Vue
- Advanced statistics, including forecasting and regressions
- Public finance and economics research

OTHER SKILLS

- The ability to analyze complex technical information
- Open source software and good government evangelist
- Can extract meaningful insights from complex datasets and communicate key results in an accessible manner
- The ability to design and carry out data-driven research projects

OTHER ACTIVITIES

- Mentor for inaugural <u>Harvard</u> <u>Climate Justice Design</u> <u>Fellowship</u>, Class of 2022
- Keepers Program, Leadership Philadelphia, Class of 2022

A public sector data scientist leading a team working to produce data-driven, objective analysis of policies impacting the City of Philadelphia's finances.

A lecturer at the University of Pennsylvania teaching a Pythonbased course on geospatial data science, data visualization, and predictive analytics.

WORK EXPERIENCE

DIRECTOR OF FINANCE, POLICY, AND DATA

<u>City Controller's Office</u>, City of Philadelphia February 2018 – Present

- Leads a team producing <u>data-driven reports</u> on policies impacting City of Philadelphia finances
- Relies on a variety of analysis tools in the fields of statistics, economics, and data science
- Focuses on accessibility and clarity, building interactive data visualizations and reports to communicate complex ideas to the public

LECTURER, MASTER OF URBAN SPATIAL ANALYTICS

Univ. of Pennsylvania September 2019 - Present

- Teaches <u>Geospatial Data Science</u> in the <u>Masters of Urban Spatial</u> <u>Analytics (MUSA)</u> program in the Weitzman School
- Covers a wide range of data visualization, data science, and machine learning techniques using a Python stack
- Focuses on real-world case studies in the urban planning and public policy realm

EDUCATION HISTORY

UNIVERSITY OF CALIFORNIA, BERKELEY

PhD in Astrophysics | 2017

- Co-authored papers with more than 2,300 citations, including 6 first-author papers (552 citations)
- DOE Office of Science Research Fellow
- National Science Foundation Graduate Research Fellow

PRINCETON UNIVERSITY

Bachelor of Arts in Astrophysics, Certificate of Computing | 2011

- Graduated summa cum laude
- Elected member of Phi Beta Kappa
- Thesis work recognized as a top 10 physics breakthrough in 2012 by Physics World