



POLICY DIRECTOR  
DATA SCIENTIST

# NICK HAND, PHD

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 Python-based course on geospatial data science, data visualization, and predictive analytics.



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@nickhandphl



@nickhand

## AREAS OF EXPERTISE

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

## OTHER SKILLS

- The ability to analyze complex technical information
- 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

## WORK EXPERIENCE

### DIRECTOR OF FINANCE, POLICY, AND DATA

City Controller's Office, City of Philadelphia | 2018 – Present

- Leads a team producing data-driven reports 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, producing interactive data visualizations to communicate complex ideas to the public

### LECTURER, MASTER OF URBAN SPATIAL ANALYTICS

Univ. of Pennsylvania | 2019 – Present

- Python-based course in the School of Design for urban planning students
- Teaches the "pipeline approach" to data science
- 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 1,800 citations, including 6 first-author papers (373 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