

Nick Steiner, PhD.  
557 W. 148<sup>th</sup> St.  
New York, NY 10031

Email: [nick.steiner@gmail.com](mailto:nick.steiner@gmail.com)  
Web: [nicksteiner.com](http://nicksteiner.com); [github.com/nicksteiner](https://github.com/nicksteiner)  
Phone: 646-715-8282

Proficient problem solver and communicator with a record of successful science projects using advanced mathematical tools and cutting-edge data systems. Expert data engineer and manager with 5 years of experience leading data production for several world-class scientific efforts.

## EXPERIENCE

---

<b>Management</b>	Science data co-lead for NASA Earth Venture Mission, Carbon in the Arctic Vulnerability Experiment (CARVE). Assembled quality-controlled NASA data product to the Distributed Active Archive Center at Oak Ridge National Laboratory.
<b>Problem solving</b>	Conceptualized cutting edge algorithm to detect events in satellite time series data leading to new surface hydrology records and insight. Designed a data system to process satellite data using advanced database technology (SciDB). Invented a water-craft environmental data collection platform for hazardous polar environments featured in National Geographic Magazine (June 2010) and demonstrated during a Greenland expedition.
<b>Strategy</b>	Co-author and co-investigator on two proposals funded by the NASA Earth Science program with science budgets totaling \$1.6 million.
<b>Communication</b>	Reported research findings in prestigious peer-reviewed journals. Obtained high level public speaking skills via teaching and professional presentations. Generated scientific high-impact graphics/animation.

## POSITIONS

---

2016 - current	<b>Research Scientist</b> <i>Earth and Atmospheric Science, The City College of New York, CUNY, New York, NY</i> -Topics: Assessing Impacts of Climate-Induced Change on River Flow and in the High Mountain Asia Region, Monitoring Seasonal Soil Frost Dynamics in Arctic Ecosystems. -Identified and successfully secured research funding -Co-supervised three PhD research students
2016	<b>National Aeronautics and Space Administration (NASA) Faculty Research Fellow</b> <i>Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA</i> -Topic: The Remote Sensing of Surface Properties over the Alaskan Arctic in Support of the Carbon in the Arctic Reservoir Experiment (CARVE)
2012 – 2016	<b>Postdoctoral Research Fellow</b> <i>Environmental Crossroads Initiative Advanced Science Research Center, CUNY, New York, NY</i> -Awarded NASA Group Achievement Award for the Carbon in the Arctic Vulnerability Experiment -Appointed to National Snow and Ice Data Center User Working Group, Boulder, CO

## EDUCATION

---

PhD.	Earth and Environmental Science, The Graduate Center, CUNY, 2012
M.S.	Earth Science, The City College of New York, CUNY, 2007
B.A.	Political Science, University of Colorado, Boulder, CO, 2004

## TEACHING EXPERIENCE

---

<b>Quantitative Methods for Geophysical Data Analysis:</b> CUNY, EAS31115, 2013 (Co-Instructor) Topics: Interpolation/Curve Fitting, Root Finding, Numerical Integration/Differentiation
<b>MATLAB for Environmental Science:</b> CUNY, EAS31109, 2012 (Instructor) Topics: Science Programming, Univariate/Bivariate Statistics, Hypothesis Testing

## TECHNICAL SKILLS

---

<b>Programming Languages/Platforms:</b> Python(proficient), (Numpy, Sci-py, Pandas, Xarray, SQLAlchemy, Scikit-Learn), SQL (PostgreSQL, SQLite), MATLAB, SciDB (AFL/AQL), Bash, Linux/UNIX, C++(familiar)
<b>Applied Mathematics (used in peer-review):</b> Wavelet Transform Analysis, Regression Analysis, Hypothesis Testing and Confidence Intervals, Bootstrapping, Analysis of Variance (ANOVA) Statistical Models

## PUBLICATIONS

---

Author/co-author of 10 peer-reviewed publications in academic journals, having 190 citations, h-index: 6  
Selected Publication: Steiner, N., and M. Tedesco. "A wavelet melt detection algorithm applied to enhanced-resolution scatterometer data over Antarctica (2000–2009)." *The Cryosphere* 8.1 (2014): 25-40. (IF 5.541)