

# NIKOS DANIILIDIS

www: <http://nikosd.me>

linkedin: <https://www.linkedin.com/in/ndaniilidis>

e-mail: [nikos.daniilidis@gmail.com](mailto:nikos.daniilidis@gmail.com)

Phone: (510) 495-7126

## PROFILE

Scientist committed to extracting insights from data-intensive applications.

*Background:* atomic physics, condensed matter physics, electrical & computer engineering

*Expertise:* scientific programming & data analysis; modelling and characterization of complex processes; computer-aided control and optimization; scientific writing

*Team worker:* worked with large teams building complex experimental setups

*Supervisor:* guided graduate and undergraduate students in their projects

*Presenter:* 10+ years experience presenting at conferences & funding-review meetings

*Manager:* co-authored research grants, helped plan & set up UC Berkeley ion trapping lab

## EDUCATION

Ph.D., Physics, *Brown University*, Providence, RI, 2008, *X. S. Ling group*

Sc.M., Physics, *Brown University*, Providence, RI, 2003

Diploma, Electrical and Computer Engineering,

*National Technical University of Athens*, Athens, Greece, 2001 (*5-year program*)

## PROFESSIONAL EXPERIENCE

Post Doc (October 2009–present)

*Department of Physics, University of California Berkeley, H. Häffner group*

Junior Scientist (September 2007–September 2009)

*IQOQI, R. Blatt group, Innsbruck, Austria*

Post-Doc (October 2007–January 2008)

*ETH, Zürich, A. Wallraff group, Switzerland*

## AWARDS

Marie Curie Intra European Fellowship for Career Development

April 2008–March 2010, *European Commission*

Forrest Award for Excellent Work Related to Experimental Apparatus

May 2008, *Brown University*, Providence, RI, USA

Award for Excellence as a Graduate Teaching Assistant

May 2002, *Brown University*, Providence, RI, USA

## SKILLS

*Scientific programming/Data analysis:* Python, Matlab, R, SQL, Hadoop/MapReduce

*Scientific writing:* research articles, review articles, scientific commentaries, grant proposals

*Modelling/Design:* modelling-characterization of noise processes, electromagnetic simulations, computer-aided control, device design & development

*Prototype building:* rf & digital electronics, microfabrication, lasers, vacuum, cryogenics

*Characterization:* neutron scattering, surface treatment/analysis, low-level measurements

## DATA EXPERIENCE

*Data munging:* xml, html, json, pdf, text

*Data manipulation:* Python Pandas, R, Matlab, SQL, Hadoop/MapReduce

*Machine learning:* Python scikit-learn, R

*Projects:* <http://nikosd.me/projects/index.html>

*Github:* <https://github.com/nikos-daniilidis>

*Blog:* <http://oligotropos.wordpress.com/>

## PROFESSIONAL ACHIEVEMENTS

- ✧ Co-authored grants, worth in excess of \$ 1 M
- ✧ Participated in planning/building UC Berkeley ion trapping group
- ✧ Conducted/Analyzed data-intensive experiments: ion trap, neutron scattering, ultrasonics
- ✧ Coauthored fourteen publications (see <http://nikosd.me/publications/index.html>)
- ✧ Developped methods/algorithms/Matlab library for ion-trap electrostatic control (<https://github.com/HaeffnerLab/trap-simulation-tools-matlab>)
- ✧ Guided, coordinated Python translation of library for ion-trap electrostatic control (<https://github.com/HaeffnerLab/trap-simulation-tools-python-27>)
- ✧ Developped, fabricated ion-trap chips for UC Berkeley, MIT, Uni Mainz, Uni Innsbruck
- ✧ Designed & built Surface-Science/Ion-trapping/UHV system
- ✧ Designed cryostat for ion trapping
- ✧ Designed & built cryogenic calorimeter

## HOBBIES

Dancing, hiking, open-sea swimming, the outdoors