Vicky Chuqiao Yang

Department of Engineering Sciences and Applied Mathematics
Northwestern University, 2145 Sheridan Road, M410, Evanston, IL 60208
vcy@u.northwestern.edu | vcyang.com | (847) 491-8783

Education

Northwestern University

Ph.D. Engineering Sciences and Applied Mathematics	Expected June 2018
Certificate in Integrated Data Science	Expected June 2017
M.S. Engineering Sciences and Applied Mathematics	2014

Worcester Polytechnic Institute

B.S. Mathematics; B.S. Physics, (with high distinction)	2013

Workshops and training

- Data Visualization Summer School, Northwestern — 2016
- Mathematical Problems in Industry Workshop — 2015

Project and Work Experience

Northwestern University — 2014 - Present

- 'Dynamics of political elections'
  Develop model, analyze congressional voting records in Python

- 'Why bigger cities have higher rates of inventions and crime?'
  Work presented at multiple national and international conferences
  Develop model; analyze crime, invention, and email communication data

Argonne National Laboratory (Internship) — 2012

- Fluid dynamics and thermal modeling for a cooling mechanism in particle accelerator
  Present work at Argonne and Fermilab and academic conference

Worcester Polytechnic Institute — 2011 - 2013

- 'Model microwave-assisted production of graphene sheets'.
  Reduced computational time from hours to less than a minute.
  Model accurately represents experimental data, and is used in further research
  Work won multiple awards at national and international conferences

- 'Effect of international accents on employment decisions'
  Design and conduct social experiments, analyze data in SPSS

Leadership Experience

- Co-founder and President, NuTango, Argentine Tango Club at Northwestern — 2015 - present
- President, Society for Industrial and Applied Mathematics, Northwestern Chapter — 2016 - present
- Exec board member, Northwestern Graduate Leadership & Advocacy Council — 2016 - present
- President, Pi Mu Epsilon Math Honorary Society, WPI Chapter — 2012 - 2013

Awards and Honors

- Walter Murphy Fellowship, Northwestern University
- First place, Student Paper Competition, Annual Microwave Power Symposium
- Second place, Student Paper Competition, IEEE Student Conference
- Provost's Award for Outstanding Major Qualifying Project, WPI
- Salisbury Prize for Outstanding Senior, WPI

Computer and Programing Skills

MATLAB, Python, Latex, Maple, d3, C, Mathematica, Bash, SPSS, QuickWave3D, Microsoft Office

Selected Coursework

Numerical methods for partial differential equations, probability, statistics, stochastic processes, machine learning, social network analysis, investment science, optimization, linear algebra