

Courtney Y. Paquette (née Kempton)

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EDUCATION

University of Washington

Seattle, WA

09/11-08/17

- PhD in Mathematics (emphasis in Optimization) Completed June 2017
Thesis: *Structure and complexity in non-convex and nonsmooth optimization*
Advisor: Dmitry Drusvyatskiy

University of Washington

Seattle, WA

09/07-06/11

- Majors: Mathematics and Business Administration (emphasis in Finance)
- Mathematics GPA: 3.94, Business GPA: 3.93, Cumulative GPA: 3.93
- Summa Cum Laude in Finance, Magna Cum Laude with Honors in Mathematics

POSITIONS

Lehigh University-Industrial and Systems Engineering

Bethlehem, PA

01/17-present

- NSF TRIPODS Postdoctoral position

Ohio State University-Mathematics

Columbus, OH

08/17-12/17

- Ross Assistant Professor (Postdoc)

University of Washington-Mathematics

Seattle, WA

09/11-08/17

- Graduate Student

AWARDS

- Tanzi-Egerton Fellowship Award (2016)
- Excellence in Teaching Award (UW Math department) (2012)
- Nominated for Excellence in Teaching (university-wide award) (2012)

TEACHING

Lead Teaching Assistant

University of Washington, Seattle WA

06/16-08/17

- Organize and coordinate a 5 day TA orientation for incoming math graduate students
- Advises incoming graduate students on skills in teaching as a TA Mentor
- Supervises first year graduate students

Research Experience for Undergraduates (REU) Teaching Assistant

University of Washington, Seattle WA

Summers '11, '12, '15

- Assisted groups of 2-3 students in projects related to inverse problems

Teaching Assistant

University of Washington, Seattle WA

09/11-08/17

- Teaches own class for a sophomore-level Differential Equations Class as well as a TA for the introduction calculus series

PAPERS

Papers are arranged in reverse chronological order, according to the date they are submitted to the arXiv

- D. Davis, D. Drusvyatskiy, and C. Paquette. *The nonsmooth landscape of phase retrieval*. arXiv: <https://arxiv.org/pdf/1711.03247.pdf>
- C. Paquette, H. Lin, D. Drusvyatskiy, J. Mairal, and Z. Harchaoui. *Catalyst Acceleration for Gradient-Based Non-Convex Optimization*. arXiv: <https://arxiv.org/pdf/1703.10993.pdf>

- D. Drusvyatskiy and C. Paquette. *Efficiency of minimizing compositions of convex functions and smooth maps. (submitted 2nd round Math. Prog.)* arXiv: <https://arxiv.org/pdf/1605.00125.pdf>
- D. Drusvyatskiy and C. Paquette. *Variational analysis of spectral functions simplified.* Journal of Convex Analysis. 25(1), 2018.

INVITED TALKS

- *Generic acceleration schema beyond convexity*, INFORMS annual meeting (2017), Houston, TX (October 2017)
- *Minimizing convex composites*, Lehigh University Optimization Seminar, Bethlehem, PA (September 2017)
- *Proximal methods for minimizing convex compositions*, SIAM-optimization, Vancouver, BC (May 2017)
- *Catalyst for Gradient-based Nonconvex Optimization*, Inria-Grenoble Seminar, Grenoble (April 2017)
- *Generic acceleration schema beyond convexity*, Optimization and Statistical Learning, Les Houches (April 2017)
- *An accelerated algorithm for minimizing convex compositions*, West Coast Optimization Meeting, University of British Columbia (September 2016)

INTERNSHIPS

Microsoft Corporation

Redmond, WA

06/10-09/10

SQL Server Strategy Intern (Financial Rotation Program Intern)

- Developed an intricate model in Excel to illustrate Microsoft's volume licensing trends from customer, revenue, and contract data
- Presented recommendations on both SQL Server's EAP and mobile strategy to the executive team
- Invented a metric to measure the success of SQL Server's EAP and forecasted its revenue over the next three years

State Farm Insurance

DuPont, WA

06/09-08/09

Planning and Analysis Summer Hire Intern

- Analyzed production data on young adults and formulated conclusions that were presented to a committee
- Processed two weekly property and casualty trend reports while also completing numerous special requests

EXTRA-CURRICULAR

Trends in Optimization Seminar: Organizer

University of Washington, Seattle

2016-2017

- Arranged and scheduled student and faculty speakers from multiple departments (computer science, electrical engineering, statistics, mathematics, and applied math)

UW AWM Chapter: Secretary and Organizer

University of Washington, Seattle

2015-2017

- Part of the leadership group that established the University of Washington's first AWM chapter
- Chief organizer of a campus outreach tutoring program to encourage undergraduate women to pursue mathematics

Graduate-level Research in Industrial Projects for Students (GRIPS, part of IPAM)

Berlin, Germany

Summer 2015

Research Intern-Supply Chain Management

- Designed and implemented six new heuristics in C to solve a supply chain model as part of a team of four
- Used machine learning clustering algorithms to analyze characteristics of solutions

Mathematical Modeling Competition

Seattle, WA

February 2011

- Researched/developed a mathematical model that optimized the location of repeaters