

# Curriculum Vitae

Maria Dimakopoulou

Phone: +1 (929) 257 8862  
Email: [madima@stanford.edu](mailto:madima@stanford.edu)  
Address: Huang Engineering Center, Stanford University, Stanford, CA 94305-4121

## EDUCATION

**STANFORD UNIVERSITY** **6/2015 – present,**  
**Stanford, CA**  
**Ph.D. in Management Science & Engineering Department**  
*Advisors: Professor Benjamin Van Roy and Professor Susan Athey*  
**GPA 4.25/4.30**

- Recipient of the Stanford MS&E “Outstanding Academic Achievement at the Graduate Level” award.
- Recipient of the “Arvanitidis in Memory of William K. Linvill” Stanford Graduate Fellowship.

**STANFORD UNIVERSITY** **6/2015 – 6/2016,**  
**Stanford, CA**  
**M.Sc. in Management Science & Engineering Department**  
*Operations Research*  
**GPA 4.23/4.30**

- Graduated 1st of my class out of 146 students.

**NATIONAL TECHNICAL UNIVERSITY OF ATHENS (NTUA)** **2009 – 2014,**  
**Athens, Greece**  
**M.Sc. and B.Sc. in Electrical Engineering & Computer Science Department**  
*Computer Science & Computer Systems Major, Management & Finance Minor*  
**GPA 10.00/10.00**

- Graduated 1st of my class and achieved the highest GPA in the 200 year history of NTUA.
- Ranked nationwide 1st in the NTUA EE & CS entry exams of 2009 with score 19920/20000.

## PUBLICATIONS & PREPRINTS

- 2018**     **Scalable Coordinated Exploration in Concurrent Reinforcement Learning**  
Dimakopoulou, Osband, Van Roy  
*arXiv:1805.08948*
- Coordinated Exploration in Concurrent Reinforcement Learning**  
Dimakopoulou, Van Roy  
*ICML 2018 (long talk)*
- 2017**     **Estimation Considerations in Contextual Bandits**  
Dimakopoulou, Athey, Imbens  
*arXiv:1711.07077, NIPS 2017 Machine Learning and Causal Inference workshop*
- Market-Based Dynamic Service Mode Switching in Virtualized Wireless Networks**  
Dimakopoulou, Bambos, Valdez-Vivas, Apostolopoulos  
*IEEE Personal, Indoor and Mobile Radio Communications*
- 2016**     **Reliable and Efficient Performance Monitoring in Linux**  
Dimakopoulou, Eranian, Koziris, Bambos  
*ACM/IEEE Supercomputing*

# PROFESSIONAL EXPERIENCE

**SALESFORCE DMP (KRUX) – Data Science Team**      **6/2016 – 9/2016, San Francisco, CA**

- **Multi-Touch Attribution Product:** Led end-to-end implementation of Krux's Attribution product, from experimental design, to game theory and causal inference based analysis on TBs of data to budget constraint optimization. Launched the product for a group of high-profile clients of Krux.
- **Mobile Marketing Association RFI:** Owned the effort of a high-priority RFI from the MMA on Krux's positioning in the Multi-Touch Attribution space that led Krux in MMA's Multi-Touch Attribution Leaders.

**GOOGLE – Advertisement Research & Optimization Team**      **11/2014 – 4/2015, NYC, NY**

- **Auction Reserve Price Optimization:** Optimized the Ad Exchange Dynamic Pricing Pipeline and prepared it for timely launch. Discovered a Dynamic Pricing feature, yielding annual revenue lift for Real-Time Bidding of hundreds of millions of dollars. My analysis led high-level management to prioritize the launch of this feature in production.
- **BIN-TAC Auction Mechanism:** Collaborated with the visiting scientist USC Professor Hamid Nazerzadeh on the analysis and implementation of BIN-TAC auction with revenue lift potential of 5% in Ad Exchange.
- **General Auction Simulation Scenarios:** Designed and implemented simulations of various auction scenarios for the Ad Exchange. The results became input to high-level strategic decisions and motivated future feature development.

**GOOGLE – Operations Research & Optimization Team**      **7/2013 – 11/2013, Paris, France**

- **Linux Kernel Performance Monitoring Subsystem Scheduling:** Led collaboration of the Operations Research team with the Linux kernel team to improve scheduling of hardware events on the processors' counters in the Linux kernel. Designed an optimal algorithm, increasing by 18% the measurement accuracy and the hardware utilization, which was launched in the Google production kernel.
- **Intel PMU Erratum:** Led collaboration of the Operations Research team with the Linux kernel team and Intel to find a workaround to the 3-year unsolved measurement corruption erratum of Intel Performance Monitoring Unit. Designed a dynamic scheduling protocol solving the erratum, which was launched in the Google production kernel and was contributed to Linux kernel 4.1 benefitting 1000s of Intel machines.
- **Earliness-Tardiness Scheduling:** Designed Linear & Mixed Integer Programming models which address Convex and Non-Convex Cost Optimization Scheduling problems in Google Technical Infrastructure and Google Geo projects.

**GOOGLE – Operations Research & Optimization Team**      **8/2012 – 11/2012, Paris, France**

- **Multi-Trip Vehicle Routing:** Designed heuristics and meta-heuristics for any generic routing model which produce 43% higher quality first solutions and find the optimal solutions 45% faster. The heuristics were launched in production and are run daily benefiting Google Geo related projects.
- **Constraint Programming:** Designed an open-source model for the NP-complete Radio Link Frequency Assignment Problem teaching the advanced usage of Constraint Programming methods in and out of Google.

## AWARDS & FELLOWSHIPS

- 2015 – 2018**
  - **“Arvanitidis” Stanford Graduate Fellowship in Memory of William K. Linvill** awarded to 1% of Stanford PhD students for excellence in research and study.
  - **Onassis Foundation Graduate Fellowship** awarded to the best performing Ph.D. students of Greek nationality worldwide.
- 2016**
  - **Stanford Outstanding Academic Achievement at the Graduate Level Award** presented annually to the top performing Graduate Student of Stanford, MS&E.
- 2015**
  - **NTUA Dean’s Honorary Award** for the best performing student in Mathematics coursework across all NTUA departments.
  - **Limmat Stiftung Foundation Academic Excellence Award**
- 2014**
  - **Intel Honorary Award** “in recognition for the creativity and drive in modifying the Linux Performance Monitoring Subsystem to improve the PMU accuracy in 1000s of Intel machines”.
  - **Google Anita Borg Memorial Fellowship** for excellence in computer science and technology, outstanding academic achievement, leadership and community involvement.
- 2013**
  - **Google Management Excellence Award** for multiple optimization accomplishments and outstanding achievements in the Operations Research & Optimization team.
  - **Google Volunteering Award** for promoting careers in engineering to women at high-school level and assisting Google’s efforts to encourage diversity.
- 2011 – 2015**
  - **NTUA Dean’s Honorary Award** presented annually for the best academic performance across all NTUA departments.
  - **State Scholarship Foundation of Greece Honorary Award** presented annually for the best academic performance in NTUA Electrical Engineering and Computer Science Department.
- 2011**
  - **NTUA Dean’s Honorary Award** for ranking nationwide 1st in the NTUA Electrical Engineering and Computer Science Department entry exams.
  - **Triantafyllidis Foundation, Greek Ministry of Finance & Greek Ministry of Education Undergraduate Fellowship**
- 2010**
  - **Ministry of Education Honorary Award** for ranking nationwide 1st in the NTUA Electrical Engineering and Computer Science Department entry exams.
- 2009**
  - **26th National Mathematics Olympiad Silver Medal.**
  - **Hellenic Mathematical Society Silver Medal** at the ‘Euclid’ Contest.
- 2008**
  - **6th European Union Science Olympiad Bronze Medal**
- 2005 – 2008**
  - **Hellenic Mathematical Society Silver or Bronze Medal** at the ‘Euclid’ Contest.
- 2003 – 2009**
  - **Greek Educational Society High-School Excellence Award** for ranking 1st in class.

## LANGUAGES & INTERESTS

- English, Greek, French
- Swimming, Tennis, Travelling, Literature