
ABOUT Applied machine learning scientist whose work appears in top data mining outlets (KDD, WWW, WSDM, Management Science, Information Systems Research, MISQ, POMS, Plos One). Years of experience with predictive modeling, (sequence-aware) recommender systems, and advanced econometric techniques (causal inference from observational data).

EDUCATION 2010-2015 **New York University**. *PhD* in Information Systems (Applied Machine Learning)
2008-2010 University of California Riverside, USA. *MS* in Computer Science
2002-2007 National Technical University of Athens. BS in Computer Engineering (5-year program)

EXPERIENCE 09/2022 - Current **Meta**
Staff Research Data Scientist
◊ TBD

07/2015 - 09/2022 **Boston College**
Assistant professor (tenure-track) of Data Analytics
◊ Built and evaluated (on millions of instances) *deep reinforcement learning* frameworks to provide career path recommendations; proposed frameworks show a 6% increase in market revenue and a 22% increase in worker wages ([more info](#)).
◊ Designed *sequence-aware recommender systems* that match workers with potential employers; predictive performance up to 40% better than state-of-the-art baselines ([more info](#), [code](#)).
◊ Proposed machine learning frameworks that predict user engagement; defined new engagement metrics that increase predictive performance by up to 40% ([more info](#)).
◊ Explored causal paths from observational data that explain how employers learn to make successful hiring choices ([more info](#)).
◊ Designed and tested (on tens of thousands of workers) dynamic expertise assessment systems that yielded 20%–60% better outcomes than state-of-the-art baselines ([more info](#)).
◊ Investigated, explained, and measured biases that affect the reputation systems of various online platforms ([more info](#)).
◊ Identified through a natural experiment the effect of purchase verification on an online market’s reputation ecosystem ([more info](#)).

06/2015-10/2015 **Upwork** (formerly oDesk)
Machine learning scientist (worked with Panagiotis Papadimitriou, now a director at Meta)
◊ Fine-tuned through feature engineering the predictive performance of the platform’s employer-worker matching algorithm. Upwork pushed many of the suggested changes to production.

05/2013-08/2013 **Microsoft Research**
Research scientist (intern; worked with Anitha Kannan and Krishnamurthy Kenthapadi)
◊ Developed algorithms for augmenting textbooks with relevant media ([patent](#)).

06/2012-09/2012 **oDesk**
Machine learning scientist (intern; worked with Panagiotis Papadimitriou)
◊ Prototyped the platform’s first employer-worker matching algorithm; its implementation led to a 4% increase in revenue and an 8% increase in outcomes ([more info](#)).

06/2011-09/2011 **oDesk**
Data scientist (intern; worked with John Horton, professor at MIT)
◊ Worked on matching skills towards a better skill recommendation system.

09/2010-05/2015 **New York University**
Research and teaching fellow (worked with Panos Ipeirotis, professor at NYU)
◊ Designed linear dynamical systems to explore how user reputation transfers across different categories and topics. ([more info](#); [relevant video](#)).

SKILLS Topics and methods: Reinforcement learning, recommender systems, deep learning, text mining, topic modeling, NLP, time series forecasting, feature engineering; supervised and unsupervised learning; Difference-in-differences, panel data, instrumental variables, Heckman two-stage selection models, propensity score matching, survival analysis.
Technical: Python, R, SQL, Stata; PyCharm, Rstudio; Linux; Have also previously used Java, C#, NoSQL (MongoDB), portable batch system, and Hadoop (MapReduce).