# **Bradford Lynch**

The Wharton School University of Pennsylvania 3620 Locust Walk, Philadelphia, PA 19104

#### Education

# University of Pennsylvania, The Wharton School

Ph.D. Student, Accounting

# University of Michigan, Ross School of Business

M.B.A., Accounting and Finance (Top 5% of class, with high distinction, GPA: 3.92) Elected: President of the Data Insights & Analytics Group (A pro bono consulting club), Values & Ethics Chair

#### **Worcester Polytechnic Institute**

B.S., Mechanical Engineering (With distinction, in-major GPA: 3.91)

#### **Research Interests**

The flow and use of information, incorporating non-traditional data (e.g. job postings) into earnings forecasts, stock return predictions, and credit risk, how downstream trading partner surprises affect upstream firms

#### **Publications**

"Risk:Return Assessment" chapter from "Financial Technology for Industrial Renewal" (with Peter Adriaens, Antti Tahvanainen, et al.).

• Published by Elinkeinoelämän Tutkimuslaitos: 2016

"Simulation of Mechanical Hydraulic System Dynamics Using Coupled Specialized Fluid Models and Multibody Dynamics."

• Published in Engine Design and Mechanical Development: 2015

# Teaching Experience

#### **University of Michigan**

Lecturer, Undergraduate core course: Making Financial Decisions	2017	
Teaching Assistant, MBA elective course: Fixed Income Securities and Markets	2017	
Teaching Assistant, Undergraduate elective course: Fixed Income Securities	2017	
Teaching Assistant, MBA and Undergraduate elective course: Financing Research Commercialization		
Worcester Polytechnic Institute		
Teaching Assistant, Undergraduate elective course: Advanced Computer Aided Design	2010	
Teaching Assistant, Undergraduate elective course: Introduction to Computer Aided Design 2009,	2010	
Teaching Assistant, Undergraduate elective course: Manufacturing Science, Prototyping, and Machining	2008	
The Bancroft School Lecturer, High-school Seniors' Independent Study: Internal Combustion Engine Fundamentals	2010	
Awards		
McGowan Fellow Runner-up (One of five runner-ups out of more than 400 students)	2016	
Cummins Chairman's Quality Award (Given to one team out of more than 90)	2012	
Best Thesis in Mechanical Engineering, Worcester Polytechnic Institute	2010	
Strage Innovation Award - Second Place, Worcester Polytechnic Institute	2008	

lynchb@upenn.edu (774) 452-3138 www.bradfordlynch.com

2018-Present

2015-2017

2006-2010

#### Patents

Not Yet Assigned	User-Specific Multi-Bot Interaction Path (Pending)	2017
Not Yet Assigned	Framework for Multi-Skill Responses and Linking (Pending)	2017
US9249698B2	Compression relief brake reset mechanism (Granted)	2016
US20160146074A1	Engine brake lash adjuster device and method (Pending)	2014
WO2014152944A1	Valve actuation system (Pending)	2014
US20160025018A1	Compression relief brake reset mechanism (Pending)	2014

# **Conference Attendance (Invited)**

2018	Jupyter Conference on Reproducible Research (invited)
2017, 2018	Google TensorFlow (Machine Learning Framework) Developer Summit (participant)
2015	ASME Internal Combustion Engine Division Fall Technical Conference (presenter)
2014-2015	SAE World Congress (session organizer)
2012	North American Gamma Technologies Conference (presenter)

#### Service

2014-2016	SAE Ad-hoc Reviewer
2013-2016	SAE World Congress Reviewer

# **Professional Experience**

#### Amazon, Senior Product Manager - Technical

- Responsible for the roadmaps of three teams (two SDMs and 16 SDEs) providing voice analytics to developers, enabling more natural spoken interactions with bots, and voice enabling structured data
- Presented new product ideas to senior leadership (VP and SVP level) to secure funding
- Developed the concepts for and launched new tooling that was featured in TechCrunch •
- Lead inventor on two patents enabling bots to coordinate efforts in solving user queries

# Microsoft. MBA Intern

Built a customer behavior and business-strategy-driven manufacturing capacity investment model, application of which identified \$46MM in savings

# **Research Institute of the Finnish Economy, Student Researcher**

 Applied machine learning algorithms to all Finnish corporate financial and credit records from 2006-2015 (1.4M total) to model default risk; outperformed accuracy of published models by 70%

# Gamma Technologies, Senior Engineer

- Developed and implemented a new algorithm to meet prospective customer request claimed impossible by competitor, enabling new market entry and acquisition of company's fourth largest customer
- Developed specialized fluid dynamics model providing insight on component life 100x faster than existing solutions; authored peer-reviewed ASME journal paper detailing new model

# **Cummins, Senior Design Engineer**

- Initiated and led Six Sigma project for development of patented system that brought new safety technology to market in China and saved \$12.6MM annually. Received Chairman's Quality Award.
- Used comparative analysis to assess engine components; reduced part count by 35% and cost by \$17.6MM annually while maintaining durability and performance

# Additional

- Volunteer work: Raised more than \$300K in donations of equipment to establish an engineeringfocused computer lab at the University of Sierra Leone and coordinated its shipment
- Ran 50 miles, unsupported, in 9 hours through the night. Wrote and used own software to optimize nutrition and pace using biometric, weather, and path data in real-time

Summer 2016

### 2010-2013

2017-2018

Spring 2016

2013-2015