

## MO TIWARI

[motiwari@stanford.edu](mailto:motiwari@stanford.edu) | (914) 482 – 5321

U. S. Citizen

[motiwari.com](http://motiwari.com)

Stanford, CA

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### **EDUCATION:**

**Stanford University**, Stanford, CA

**GPA: 4.2** 2017 – Present

Ph.D. in Computer Science

*Advisor: Sebastian Thrun*

*Research Focus: Artificial Intelligence and Machine Learning*

M.S. in Computer Science (completed during Ph.D.)

**GPA: 4.2** June 2019

**California Institute of Technology**, Pasadena, CA

Sept 2010 – June 2013

*Cumulative GPA: 4.0+ – Top 5% of Graduating Class*

B.S. in Mathematics with Honors

**GPA: 4.0+** June 2013

B.S. in Physics with Honors

**GPA: 4.0+** June 2013

**Columbia University – Columbia College**, New York, NY

**GPA: 4.1** 2009 – 2010

### **EXPERIENCE:**

**SOFTWARE ENGINEER, TECHNICAL LEAD – FACEBOOK, INC.**

2015 – 2017

- Technical lead of the team building ThreatExchange, Facebook's platform for sharing cybersecurity information
- Led product and feature development through 5 major releases that grew the number of enterprise customers from 92 to 500+
- Managed 3 interns who received and accepted fulltime offers

**SECURITY RESEARCH SCIENTIST – EXPANSE, INC. (acquired for \$800MM)** 2014 – 2015

- 5<sup>th</sup> fulltime employee; performed the first systematic, continuous, and Internet-scale capture and analysis of device data and security vulnerabilities
- Built backend and frontend infrastructure to help analysts understand terabytes of prostitution advertisements and uncover human trafficking
- Work indirectly led to dozens of arrests of traffickers and hundreds of victims saved

**RESEARCHER – DRW TRADING GROUP**

Summer 2013

- Created valuation models for various financial instruments, such as interest rate swaps and swaptions

**RESEARCHER - Undergraduate Research Fellowship**

**John Preskill Group at California Institute of Technology**

2011 – 2012

- Proved that a certain class of quantum systems would never function as a form of quantum storage, eliminating their viability in a quantum computer
- Advised by Prof. John Preskill, Dr. Spiros Michalakis, Dr. Jeongwan Haah

## RESEARCHER - I. I. Rabi Fellowship for Summer Research

LHC (Large Hadron Collider), Geneva, Switzerland

Summer 2010

- Analyzed some of the first data ever from the Compact Muon Solenoid (CMS) experiment at the Large Hadron Collider (LHC), where the Higgs Boson was later discovered
- Found and corrected experimental defects, by analyzing Missing Transverse Energy, to calibrate experimental setups
- Later received admission to the Ph.D. program in Physics at MIT to continue research on this experiment

## RESEARCHER

Yorktown High School, Yorktown Heights, NY

2007 – 2009

- Developed an assistive aid to help patients with physical disabilities complete exercises
- Patients' exercise completion rate rose 80%, a statistically significant amount, and shortened recovery time by 34%
- Won 3rd place in category internationally at Intel ISEF 2009

## PUBLICATIONS:

1. Mo Tiwari, Martin Zhang, James Mayclin, Sebastian Thrun, Chris Piech, Ilan Shomorony. "Bandit-PAM: Almost Linear Time k-medoids Clustering via Multi-Armed Bandits." <https://arxiv.org/abs/2006.06856>. *Neural Information Processing Systems (NeurIPS)* 2020.
2. Mo Tiwari et al. "Differentiation of Active Corneal Infections from Healed Scars Using Deep Learning." *American Academy of Ophthalmology (AAO)* 2020. **Best Poster Award**. Full paper in submission.
3. Serhat Arslan, Mo Tiwari, Christopher Piech. "Estimating Global Patterns in Learning Quality Using Google Search Trends". *ACM Learning @ Scale (L@S)* 2020.

## ACADEMIC HONORS

- Stanford Interdisciplinary Graduate Fellowship (SIGF) 2020 – 2023
  - Full funding for the Ph.D. for 3 years (~\$300,000 over 3 years)
  - 1 of 33 graduate student awardees, University-wide, in cohort
  - 1 of 295 awardees since award inception in 2008
- J.P. Morgan AI Research Ph.D. Fellowship 2020
- Oak Ridge Institute for Science and Education (ORISE) Fellowship 2019
- UnifyID Fellow (Declined) 2018
- Pear VC Fellow 2017 – Present
- NSF Graduate Research Fellowship Program Honorable Mention 2013
- Caltech SURF - Summer Undergraduate Research Fellowship 2011 – 2012
- IBM T.J. Watson Memorial Scholarship 2009 – 2012
- Caltech - San Pietro Travel Prize Recipient 2011
- I. I. Rabi Fellow at Columbia University 2009 – 2010
- Intel International Science and Engineering Fair (ISEF) - Third place 2009