Emaad Ahmed Manzoor

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www.eyeshalfclosed.com
{github,twitter}.com/emaadmanzoor

EDUCATION

Carnegie Mellon University, PA, USA   2016 − 2021*
Ph.D., Information Systems (H. John Heinz III College). Advisors: Dokyun Lee, George Chen.

Stony Brook University, NY, USA   2015 − 2016[1]
Ph.D., Computer Science. Advisor: Leman Akoglu.

King Abdullah University of Science and Technology, Saudi Arabia   2013 − 2015
M.S., Computer Science. Advisor: Panos Kalnis.
Thesis: Scheduling Broadcasts in a Network of Timelines.

Birla Institute of Technology and Science - Pilani (Goa Campus), India   2008 − 2012
Bachelor of Engineering (Honors), Computer Science.

WORK IN PROGRESS

- *Inferring Semantic Hierarchies from Human Curation Behavior.*
  Emaad Manzoor, Dhananjay Shrouty, Rui Li, Jure Leskovec.
  To be submitted, 2019.

- *Focused Concept Miner (FCM): Interpretable Deep Learning for Text Exploration.*
  Dokyun Lee*, Emaad Manzoor*, Zhaoqi Cheng* (*equal contribution).
  Marketing Science (revise and resubmit).
  https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3304756

PUBLICATIONS

- xSTREAM*: Outlier Detection in Feature-Evolving Data Streams.*
  Emaad Manzoor, Hemank Lamba, Leman Akoglu.
  ACM SIGKDD 2018 (research track with short presentation, top 181/983 = 18.41%).
  https://cmuxstream.github.io/

- RUSH! *Targeted Time-limited Coupons via Purchase Forecasts.*
  Emaad Manzoor, Leman Akoglu.
  ACM SIGKDD 2017 (applied data science track with poster, top 85/396 = 21.47%).
  https://github.com/emaadmanzoor/rush/

- *Fast Memory-Efficient Anomaly Detection in Streaming Heterogenous Graphs.*
  Emaad Manzoor, Sadegh M. Milajerdi, Leman Akoglu.
  ACM SIGKDD 2016 (research track with long presentation, top 70/784 = 8.93%).
  https://sbustreamspot.github.io/

PATENTS

- *Scheduling Broadcasts in a Network of Timelines.*
  Emaad Ahmed Manzoor, Haewoon Kwak, Panos Kalnis.
  Unpublished manuscript (https://arxiv.org/abs/1610.06052), 2015.
  Patent filed in February, 2015 (https://patents.google.com/patent/WO2016132332A1).

AWARDS

- Jane Street Depth First Learning Fellowship, Semi-finalist.   **2019**
- Snap Inc. Research Fellowship, Semi-finalist.   **2019**
- Marketing Science Institute Grant ($10,000), co-PI (with Zhaoqi Chen and Dokyun Lee)   **2018**
- ACM SIGKDD Student Travel Award ($3,050).   **2016, 2017, 2018**
- Institute of Advanced Computational Science Young Writer's Award ($500).   **2016**
- Stony Brook University Special CS Department Chair Fellowship ($8,000).   **2015**

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[1]Incomplete, transferred.

Professional Experience	**Pinterest Labs**, San Francisco. Research Intern.	**Summer 2018, Spring 2019**

Pinterest Labs, San Francisco. Research Intern.   **Summer 2018, Spring 2019**
Research on semantic hierarchies and graph embeddings. Advised by Rui Li and Jure Leskovec.

Max Planck Institute for Software Systems, Kaiserslautern. Research Intern.   **Summer 2017**
Research on stochastic optimal control. Advised by Manuel Gomez-Rodriguez.

Quantitative Engineering Design, San Francisco (remote). Research Intern.   **Summer 2015**
Research and development on streaming machine-learning. Advised by William Wu and Jiehua Chen.

Oregon State University, Corvallis (remote). Google Summer of Code Intern.   **Summer 2014**
Designed and developed a REST service to enable remote datacenter machine administration.

Yahoo!, Bangalore. Software Engineer.   **Jul 2012 − Aug 2013**
Developed a distributed streaming NLP system for trending-topic detection (Storm, Kafka, HBase).

Tachyon Technologies, Bangalore. Research Intern.   **Summer 2012**
Designed algorithms for automatic comic book digitization. Advised by Ram Prakash Hanumanthappa.

Yahoo!, Bangalore. Software Engineer Intern.   **Fall 2011**
Designed and developed a configuration system for trending-topic internationalization.

University of Massachusetts, Lowell (remote). Summer of Code Intern.   **Summer 2011**
Designed and developed a Debian package building and maintenance pipeline on Launchpad.

Teaching

See http://www.eyeshalfclosed.com/teaching/ for teaching material and student evaluations.
- 46-891 Mining Unstructured Data (co-created with Dokyun Lee, CMU)   **S19**
- 95-865/94-775 Unstructured Data Analysis (George Chen, CMU).   **F17, S18, F18, S19**
- 95-813 Intermediate Databases (Jeremy Smith, CMU).   **F17, F18**

Selected
Coursework

All completed courses listed were awarded grades A- or higher. Spring 2019 courses are ongoing.

Economics & Social Sciences
- 47-958: Economining (Dokyun Lee, CMU)   **Fall 2017**
- 90-906: Introduction to Econometric Theory (Edson Severnini, CMU)   **Spring 2017**
- 90-908: Microeconomics (Brian Kovak, CMU)   **Fall 2016**

Statistics & Machine Learning
- 10-716: Advanced Machine Learning (Pradeep Ravikumar, CMU)   **Spring 2019**
- 36-705: Intermediate Statistics (Larry Wasserman, CMU)   **Fall 2016**

Computer Science
- CSE-506: Operating Systems (Michael Ferdman, Stony Brook University)   **Fall 2015**
- CSE-537: Artificial Intelligence (I.V. Ramakrishnan, Stony Brook University)   **Fall 2015**
- AMCS-241: Probability and Random Processes (Mohammed-Slim Alouini, KAUST)   **Fall 2014**
- CS-390: Computational Complexity (Antoine Vigneron, KAUST)   **Fall 2014**
- CS-341: Advanced Topics in Data Management (Panos Kalnis, KAUST)   **Spring 2014**
- CS-229: Machine Learning (Xiangliang Zhang, KAUST)   **Spring 2014**
- CS-220: Data Analytics (Xin Gao, KAUST)   **Fall 2013**

Programming
Languages
- Analysis: Python (preferred)
- Performance: C++ (preferred), Java (for distributed systems)