Emaad Ahmed Manzoor

4700 King Abdullah University of Science and Technology Thuwal 23955-6900 Saudi Arabia emaadahmed.manzoor@kaust.edu.sa (+966) 54 9148275 · eyeshalfclosed.com

EDUCATION

King Abdullah University of Science and Technology

Aug 2013 – Now

Master of Science, Computer Science

Birla Institute of Technology and Science - Pilani

Aug 2008 – May 2012

Bachelor of Engineering (Honours), Computer Science

Professional Experience Yahoo!, Bangalore, Software Systems Engineer

Jul 2012 - Aug 2013

Primary member of the team building a distributed system for low-latency event detection from multiple parallel content streams. This system reduced event detection latency by 600%.

- \bullet Built adapters to enable data flow between the source message queues and core streaming system.
- Built components for streaming distributed counting of strings, n-grams and distinct words.
- Designed and evaluated storage schemes to minimize the duration of failure recovery from disk.
- Wrote a test framework to simulate and verify the combined streaming and persistence systems.

Yahoo!, Bangalore, Software Systems Engineer Intern

Jul - Dec, 2011

- Reimplemented the event detection system to be centrally configurable and multi-threaded.
- Implemented a research prototype to detect search trends that are niche to certain geographic areas.
- Was offered a full-time position (offered to 3 of the 14 interns from my university).

RESEARCH EXPERIENCE Modeling Android Application Permissions for Malware Detection Aug 2013 – Now

Advised by Dr. Xiangliang Zhang, Machine Intelligence and Knowledge Engineering Lab, KAUST.

The project's goal is to characterize Android applications given only the permissions they request.

- Designing undirected hierarchical graphical models to infer Android application types.
- Applying variational and sampling methods for approximate inference of the posteriors.
- Evaluating model performance on the Android malware classification task.

Automatic Comic Book Restoration from Camera Images,

May – Jul, 2012

Advised by Mr. Ram Prakash Hanumanthappa, CEO, Tachyon Technologies, Bangalore.

- Designed computer vision algorithms to digitize comic books from mobile camera images.
- $\bullet\,$ Built an Android application wrapping this research up into a usable prototype.

TEACHING EXPERIENCE Software Development for Portable Devices, Google-funded Teaching Assistant. **Jan – May, 2011**MIT Indian Mobile Initiative, Student Mentor. **Jun – Jul, 2011**

Programming Languages and Compiler Construction, Teaching Assistant. Jan – May, 2012

Honours and Awards King Abdullah University of Science and Technology Fellowship.

2013

2013

Erasmus Mundus LCT Masters Scholarship¹ (awarded to 4 international applicants).

Winner, Random Hacks of Kindness Bangalore. 2011

MVHub Summer of Code, funded by Google and the University of Massachusetts, Lowell. 2011

Consultancy Development Cell Fellowship, Ministry of Science and Technology of India. 2009

OTHER PROJECTS The OpenIntents Android proximity sensor simulator. (code.google.com/p/openintents/source/detail?r=3280)

A tutorial at PyCon India 2012. (speakerdeck.com/emaadmanzoor/building-a-cluster-with-python-and-beanstalkd)

A tool to visualize graph algorithms on custom graphs, step-by-step. (emaadmanzoor.github.com/graphy)

A public transport initiative to OCR bus tickets and allot reward miles. (mybmtcmiles.com)

Programming Languages Java (proficient). Python (experienced). C, Clojure, MATLAB, Perl, Ruby (novice).

¹Turned this offer down, having already accepted the KAUST fellowship.