# Ayush Patwari

# **EDUCATION**

MAY 2017 MS(Thesis) in Computer Science, Purdue University, US | Gpa: 4.0/4.0

MAY 2013 B.Tech(Hons.) in CSE, IIT Kharagpur, India | GPA: 9.09/10.0

# **WORK EXPERIENCE**

AUG 2017 -

Software Engineer at GOOGLE INC., US

# Current Aug 2015

Graduate Research Assistant at DCSL LAB, PURDUE UNIVERSITY, US Detecting False Data in Crowd-Sourced Systems | sklearn, nltk, flask, scrapy

- Automated Fact-Checking Using Natural Language Processing to automatically detect misleading statements in political campaigns.
- **Spam Detection in Web Forums** Modelled inter-relations between users, groups and threads and created a semi-supervised iterative framework to detect spam posts.
- Spam Video Detection in Video Portals Used supervised learning techniques to detect spam videos with misleading meta-data in Youtube achieving a F-score of 0.84.

Jun 2016 - Aug 2016

Summer Intern at LAWRENCE LIVERMORE NATIONAL LABORATORY, CA, US *Understanding DRAM Errors in HPC Clusters* | python, sklearn, matplotlib

- Build a visualization tool to study spatial correlation of DRAM correctable memory errors in High Performance Computing clusters over different time slices.
- Define metrics for and used hypotheses testing to show that observed errors occur in groups across the physical layout and these are not due to a random distribution.

JUL 2013 - JUL 2015

Software Engineer at SAMSUNG R&D INSTITUTE, India Multi-Modal Sensor Data Analytics | android sdk, c++, weka

- Tennis Performance App Developed a learning framework on streaming sensor data to allow comparison with experts and peers to improve skills and playing technique.
- Indoor Floor Map Generation Developed a system to generate indoor floor maps using a single smartphone, fusing acoustic signal processing and dead reckoning system.

MAY 2012 - JULY 2012

Summer Intern at LCA LAB, EPFL, Switzerland *Location Privacy Intrusion of Mobile Apps* | Qt sdk, html, js, css

Developed a web monitoring tool to analyze location access history of Qt applications in Nokia to determine the extent of privacy leaks.

#### **PUBLICATIONS & PATENTS**

- Efficient characterization of tennis shots and game analysis using wearable sensors data, SENSORS, 2015 IEEE Srivastava, R., Patwari, A., Kumar, S., Mishra, G., Kaligounder, L., and Sinha P
- Method and Device for Generating Data Representing Structure of Room
   Patwari, A., Mishra, G., Srivastava, R., De, A., and Patkar, D. (United States Patent Application 20150347638)
- TennisTrac App for Samsung Galaxy devices for use with Gear watch (http://tinyurl.com/tennistraq)

# PROGRAMMING SKILLS

# GRADUATE COURSEWORK

Proficient: PYTHON, C, C++ Intermediate: JAVA, SCALA, SQL, JAVASCRIPT, HTML Tools: SCIKIT-LEARN, FLASK, ANDROID SDK, WEKA, HADOOP MACHINE LEARNING/NLP, DATA MINING
PARALLEL COMPUTING, FAULT TOLERANT DESIGN, ALGORITHMS
INFORMATION SECURITY, COMPILER DESIGN, OPERATING SYSTEMS

# OTHER PROJECTS https://github.com/patwaria

- Implemented paging support for the XINU operating system on the Intel architecture, OS Project, Fall 2015
- Stance Classification for Ideological debates, NLP Project, Spring 2016
- Parts-of-Speech Tagger for Tweets using Structured Perceptron and MEMM models, NLP Project, Spring 2016
- · Meta-Search .Net Application for Academic Scholars and Citations, Opensoft Competition, IIT Kharagpur, 2013
- · Study on Routing in Delay Tolerant Network using Omni-Directional Antennae, IIT Kharagpur, Dec-Jan 2011