

MANOJ P. SAHA

Graduate Assistant, School of Computing and Information Sciences, Florida International University

Email: msaha002@fiu.edu ◊ Website: damrl.cs.fiu.edu

RESEARCH INTERESTS

Data Storage Systems, Key-Value Stores, Solid State Drives, Data Mining and Machine Learning Systems

EDUCATION

M.S. in Computer Science May 2019

University of Texas at El Paso, USA CGPA : 3.72/4.0

MBA (Marketing) Nov. 2014

University of Dhaka, Bangladesh CGPA : CGPA: 3.56/4.0

B.S. in Electronic & Telecommunication Engineering Apr. 2009

North South University, Bangladesh CGPA : CGPA: 3.53/4.0

PROFESSIONAL EXPERIENCE

Graduate Assistant Aug. 2019 - present

Florida International University, USA

- Developed indexing techniques for key-value solid state drive (KVSSD) [C++].
- Analyzed solid state drive performance under different temperature and humidity settings in the operating environments.
- Worked as a teaching assistant for Human Computer Interaction (HCI) course.

Research/Teaching Assistant Sep. 2016 - Apr. 2019

University of Texas at El Paso, USA

- Developed dynamic word embedding models to capture temporal information evolution [Python, TensorFlow].
- Surveyed the application of natural language processing techniques to predict future security threats in software [Python, TensorFlow].
- Assisted in teaching multiple courses including Data Structures, Automata, Computer Architecture, and Computational Thinking [C, Python, Assembly].

Data & Growth Consultant May 2015 - Jul. 2016

Polar Labs, Singapore

- Developed systems for data warehousing, analysis and reporting [Python, SQL Server, MS Azure, MS PowerBI, MS Excel, Tune Mobile Attribution].
- Devised fraud detection models from attribution and app usage data.
- Increased ROI by 30% for user acquisition campaigns.

Co-Founder Mar. 2014 – Aug. 2015

Alo Ventures, Bangladesh

- Worked on web mining, data scraping, data wrangling and analysis [Python, PostgreSQL, Linux].
- Planned and managed marketing analytics integration in mobile apps and games for partners [Google Analytics, Game Analytics].

Executive - Operations & Strategy Apr. 2012 – Aug. 2013

A. R. Communications, Bangladesh

- Worked on data integration and analysis for media products [Google Analytics, Histats, MS Excel].
- Utilized user behavior data to increase website traffic by 20%.

Supervisor - Radio & Transmission Jan. 2011 – Mar. 2012

Ericsson, Bangladesh

- Supervised Radio Access Network commissioning and implementation projects [Mini Link TN, OMT].

Radio-Frequency Engineer Apr. 2010 - Jan. 2011

TRX Optimizations, Bangladesh

- Worked on post-processing, analysis and optimization of network KPIs [MS Excel, Nokia-Siemens Networks OSS].

Network Trainee

Spectrum Engineering Consortium, Bangladesh

Oct. 2009 - Apr. 2010

- Designed wireless and optical infrastructure solutions for clients [Cisco IOS].

AWARDS

- Institute of Defense and Security Tuition Support Scholarship (2018)
- Anita Mochen Loya Graduate Engineering Fellowship (2016)

RESEARCH PRESENTATIONS

- Manoj Saha, Janki Bhimani, "RHIK - Resizable Hash-based Indexing for KVSSD," 12th USENIX Workshop on Hot Topics in Storage and File Systems, Jul 2020 (Accepted as poster)
- Manoj Saha, Janki Bhimani, "Towards Developing a High-performance, High-reliability Key-Value SSD," Poster presented at FIU SCIS Research Day, Oct 2019
- Baolin Li, Tirthak Patel, Adnan Maruf, Manoj Saha, Janki Bhimani, Devesh Tiwari, "Do Temperature and Humidity Affect SSD Performance?", Poster presented at FIU SCIS Research Day, Oct 2019

KEY PROJECTS

Google Play app data scraping and analysis

Implemented web crawlers for large-scale data collection [Python, SQL].

Cdiscount.com image classification challenge on Kaggle

Worked on image classification models for massive multi-class classification [Python, TensorFlow, Keras].

Influencer detection from Yelp dataset

Developed heuristic models to identify local influencers on Yelp [Python, SQL].

SKILLS

General programming: C/C++, Python, Java

Scientific programming: TensorFlow, NumPy, Pandas, Matlab

Statistical programming: R, SAS

Web programming: PHP, JavaScript

Database: SQL

Version control: Git

Misc. : Shell, Assembly, L^AT_EX

Platform: Linux, Microsoft Azure