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# Amir H. Payberah

# Research Interests

Distributed Systems and Algorithms, Data Intensive Computing, Large Scale Data Mining

# **Employment**

# Present Employment

- 2018 now **Assistant Professor of Computer Science**, KTH Royal Institute of Technology, Sweden.
  - Previous Employment
- 2017 2018 Machine Learning Scientist, University of Oxford, UK.

Developing machine learning and deep learning algorithms to find patterns and trends in large biomedical datasets.

2013 – 2017 **Senior Researcher**, *SICS Swedish ICT*, Sweden.

Worked on data intensive computing platforms, in particular data stream processing and graph processing, mainly using Spark and Flink.

2016 – 2017 Adjunct Lecturer, KTH Royal Institute of Technology, Sweden.

Gave a course on data intensive computing (part time, 20%).

2014 – 2016 Adjunct Lecturer, Amirkabir University of Technology (AUT), Iran.

Gave courses on distributed systems, data intensive computing and operating systems (part time, 20%).

2007 – 2013 **PhD Student**, *KTH Royal Institute of Technology*, Sweden.

Worked on distributed graph partitioning, algorithms for P2P media streaming, and distributed topic and content publish/subscribe systems.

2007 – 2007 **Researcher**, Parallell Dator Centrum (PDC), Sweden.

Worked on grid resource management, e.g., dynamic resource allocation on gLite.

2000 – 2006 Linux Technical Leader, SiNA Co., DPI Co, and GATA Co., Iran.

Worked on different Linux distributions, e.g., embedded Linux kernel, file system, and device drivers.

2001 – 2002 Network Designer and Administrator, DP Co., Iran.

Local area networks administration.

#### Education

2008 – 2013 PhD in Information and Communication Technology, KTH Royal Institute of Technology, Sweden.

Thesis: Live streaming in P2P and hybrid P2P-Cloud environments for the open Internet Advisors: Prof. Seif Haridi and Dr. Jim Dowling

2006 – 2008 **MSc in Software Engineering of Distributed Systems**, *KTH Royal Institute of Technology*, Sweden.

Thesis: ForsetCast for P2P live streaming Advisors: Prof. Seif Haridi and Dr. Ali Ghodsi

2000 – 2003 **MSc in Computer Architecture**, *Amirkabir University of Technology (AUT)*, Iran.

Thesis: Distributed inspection of intrusion detection systems using mobile agents

Advisor: Dr. Babak Sadeghian

## **Professional Activities**

- Track Co-Chair of IEEE CCNC'17
- PC member of EAI GOODTECHS'16, IEEE IUCC'2014, IARIA INNOV'2014, IFIP DAIS'2013
- $\circ$  Organizing committee of EIT ICT Labs summer school on Cloud and Big Data, 2015 2016
- Reviewer of journals TPDS, JPDC, COMNET, COMCOM, COMPELECENG, IS, FGCS, COMPJ, COMPD, PPNA, JCM, WI, CPE, IJBDI, JIT, IJECE
- Reviewer of conferences ISPA'15, SIGMOD'13, CCNC'{10, 13, 17}, P2P'{08-11}, DAIS'11
- Several workshops on the Spark and Flink platforms, 2014 2017
- Several workshops on the data intensive computing platforms, 2015 2017
- Several lectures on P2P content distribution networks, DHTs, and NoSQL databases
   2013 2017

# **Publications**

- o According to Google Scholar (June 20, 2018): citation 424, h-index 12, i10-index 12
- All the papers are available at: https://payberah.github.io

# **Awards**

- Best paper award for the paper "Boosting Vertex-Cut Partitioning For Streaming Graphs", BigData'16
- Best paper award for the paper "Ja-Be-Ja: A Distributed Algorithm for Balanced Graph Partitioning", SASO'13

#### Grants

- STREAMLINE: Improving Competitiveness of European Enterprises through Streamlined Analysis of Data at Rest and Data in Motion, at SICS, from 2015 to 2018. Funded by H2020, ICT-16-2015, big data. Volume: 3.2M Euro. Responsibility: coauthor of the proposal.
- BIDAF: A Big Data Analytics Framework for a Smart Society, at SICS, from 2014 to 2019. Funded by KK-stiffen (KKS). Volume: 2.6M Euro. Responsibility: coauthor of the proposal and the leader of a work package.