Sagar Joglekar

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EDUCATION

- **Ph.D, Computer Science**
  King's College, London, UK, expected 2019
- **Masters of Science, Electrical and Computer Engineering**
  University of California, Santa Barbara , CA , USA, February 2012
- **Bachelors of Engineering, Electronics Engineering**
  University of Pune, India, May 2008

GRANTS & AWARDS

- **King's India Scholarship**
  My Ph.D. is supported by this award. King's graduate school awards this scholarship to one Indian citizen every year, to pursue scientific research.
- **Connected nations Pioneers-Finalist**
  My work on Deep learning driven urban beautification, done with Bell labs UK, is among the top 16 projects selected across the UK for this prize. The project is in the top 4 in the Creative computing category.
- **Nvidia GPU grant**
  Wrote and received the NVidia GPU grant that awards a better compute infrastructure to do representation learning research.

CITIZENSHIP Indian

RESEARCH INTERESTS Data science, Representation learning, Complex networks, Social media, Deep learning and applications for user behaviour analysis , NLP , A.I. for social good

PROFESSIONAL EXPERIENCE

Research Scientist, Nokia Bell Labs, Cambridge, UK 06/2019 – Present

As a member of the Bell labs social dynamics team, I have been working on questions that try to redefine our relationships with data, using data. I primarily work on problems around data and statistical science with a stress on human impact of data driven machine learning algorithms.

Ph.D. Fellow, King's College, Dept. of Informatics 09/2015 – Present

At King's I am working on pursuing a Ph.D. in Computer Science. My main research areas of interest fall on the intersection of Human affects, complex networks and machine learning. I am using frameworks from all these areas to understand influence and role of human affects on the dissemination of information in social networks.

Research Intern, Nokia Bell Labs, Cambridge, UK 06/2017 – 11/2017

As a part of my summer Internship at Bell labs, I worked on explainable and visualizable deep learning models for urban perception of intangible attributes like

Beauty, safety and liveliness. The output of this work is in process of publication as multiple scientific papers.

Engineering and Research Lead, Firedrop.ai 05/2016 – 06/2017

At Firedrop, I primarily conducted their engineering research, which generated insights into how to design the core inference and learning engine. The engine helped customers in their website design process, by giving them creative hints and variations.

Research Associate, Blizzard Institute , QMUL 06/2016 – 11/2016

I was working as a principle researcher for a project supported by Blizzard Institute at QML. The work involved studying message exchange topology of medical community networks to understand health of communities and support processes. There are publications in progress which are the output of this work.

Hacker/Data science consultant, HackMasters 03/2016 – 05/2019

I have worked with HackMasters as a part of their team, on several miscellaneous projects. I primarily work with them in the capacity of a data scientist/engineer. Projects may cover areas of data governance , data driven strategy or designing/prototyping new data driven systems for their clients, which include government enterprises, large consultancy firms or private sector firms.

Senior Software Engineer, Citrix Systems 02/2012 – 09/2015

My job at Citrix dealt with design and implementation of proprietary communications stack and platform libraries for Android, iOS and the web. As a team we work on implementing Citrix's client side network communications platform code. Some of the salient projects I have contributed to are as follows:

- I was a major contributor in design and development of the communications platform for our newly launched GotoMeeting web client. I designed and implemented a brand new protocol for bandwidth and computationally efficient screen sharing on HTML5 and mobile.
- Develop platform communications stack for iOS that presents an API for products to exercise and communicate with Citrix infrastructure. The platform is currently used in Citrix SaaS products like Convoi, Talkboard and GotoAssist, for audio and screen sharing media communications.
- As a part of Citrix hack-week 2013, I along with two other hackers came up with an idea to hack GotoAssist mobile endpoints and add camera stream sharing and annotations with Audio communication. This morphed the existing GoToAssist product into a tool to support real world use cases. The feature has now been incorporated and marketed as GotoSeeit

Summer Intern, Citrix Systems 06/2011 – 12/2011

My internship dealt with porting and modification of proprietary runtime communication libraries and automated testing frameworks for Android.

Systems And Bio Imaging Lab, UCSB 01/2011 – 06/2011

As a Graduate student researcher, I worked on research and development of a system to incorporate HDR imaging in biological fluorescent microscopy. This project was

part of my research at Systems and Bio-Imaging Lab at UCSB. The main aim of this project is to enable High Dynamic Range microscopy for dynamic samples.

Research Engineer, Infosys Research Labs, India 07/2008 – 07/2010

My job dealt with research and development of algorithmic solutions, exploring possibilities and conducting research in Digital Convergence. One of my major responsibilities was research, design and development of some intellectual properties and solutions that involve Computer vision based algorithms

SELECTED PUBLICATIONS

Conference

- Raman, A., **Joglekar, S.**, Sastry, N., Cristofaro, E , Tyson, G. (2018, November). Tooting Your Own Horn: Exploring the Impact of Decentralisation on the Mastodon Social Network *Under Review*
- Bhatt, S., **Joglekar, S.**, Bano, S., & Sastry, N. (2018, April). Illuminating an Ecosystem of Partisan Websites. In Companion of the The Web Conference 2018 on The Web Conference 2018 (pp. 545-554). International World Wide Web Conferences Steering Committee.
- **Joglekar, S.**, Sastry, N., & Redi, M. (2017, September). Like at First Sight: Understanding User Engagement with the World of Microvideos. In International Conference on Social Informatics (pp. 237-256). Springer, Cham.
- Dhanapal, K. B., Deepak, K. S., Sharma, S., **Joglekar, S. P.**, Narang, A., Vashistha, A. & Paul, S. (2012, July). An innovative system for remote and automated testing of mobile phone applications. In SRII Global Conference (SRII), 2012 Annual (pp. 44-54). IEEE.
- **Joglekar, S. P.** , *Narang, A., Dhanapal, K. B., & Somasundara, A. A. (2011, December). A novel way of tracking people in an indoor area. In International Conference on Advanced Computing, Networking and Security (pp. 85-94). Springer, Berlin, Heidelberg.

Journal

- **Sagar , J.** ,Daniele , Q., Miriam, R. , Luca ,A., Tobias, K. & Nishanth, S. FaceLift: A transparent deep learning framework recreating the urban spaces people intuitively love, *Under Review*
- Tobias, K., **Sagar , J.**, Luca ,A., Daniele , Q., & Miriam, R. Mapping and Visualizing Urban Beautification, To appear in IEEE Computer Graphics and Applications
- **Sagar, J.**, Sastry, N., Neil, C., Taylor, S. J., Patel, A., Duschinsky, R., & Panzarasa, P. (2018). How Online Communities of People With Long-Term Conditions Function and Evolve: Network Analysis of the Structure and Dynamics of the Asthma UK and British Lung Foundation Online Communities. JMIR.
- **Joglekar, S**, Varadharajan, V., Nair R., Nallusamy, R., & Paul, S. (2014). Robust transcoding resistant watermarking for H. 264 standard. Multimedia tools and applications, 73(2), 763-778.

- Vijayaraghavan, V., **Joglekar, S. P.**, Nallusamy, R., & Paul, S. (2010). Transcoding resistant robust watermarking technique using entropy-based selective spread spectrum. International Journal of Multimedia Intelligence and Security, 1(4), 350-362.

PATENTS

- Varadharajan, V., **Joglekar, S.**, Nallusamy, R., & Paul, S. (2014). U.S. Patent No. 8,885,871. Washington, DC: U.S. Patent and Trademark Office.
- Dhanapal, K. B., Somasundara, A. A., **Joglekar, S. P.**, Narang, A., & Paul, S. (2011). U.S. Patent Application No. 12/895,027.

TECHNOLOGY

- Programming languages: Python , Java , C++ , Javascript
- Graph mining: GiRaph , NetworkX , Gephi , Spark
- Machine Learning frameworks: TensorFlow, Theano, Caffe, Scikit Learn
- Back-end: Nodejs , Django, Flask
- Databases: MongoDB

TEACHING EXPERIENCE

- **Teaching assistant , Complex Networks Analysis (September 2016-December 2016):** I conducted tutorials and occasionally taught the course of complex networks analysis for business department at Queen Mary University of London
- **Teaching assistant Physics (Jan 2011-June 2011):** I assisted in teaching and conducted tutorials for Astronomy 1 course offered by the Physics department at UC Santa Barbara.
- **Visiting Guide and Mentor (Dec 2009-March 2010):** I mentored a group of 20 students for Robotics Forum (VIT) sponsored project to develop a hardware development platform for computer vision based robotics.
- **Lecture series (12 hrs.) on Computer vision using MATLAB and OpenCV (2008,2009):** Lecture series conducted for Robotics forum and for third year Engineering students in VIT for introduction to Image processing and use of *MATLAB* for computer vision/Image processing.
- **GMRT, Functioning and Signals processing involved (2008):** Seminar covered a comprehensive explanation of Radio telescopes and the Signals processing involve