

Janmajay Singh

CONTACT INFORMATION

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RESEARCH INTERESTS

Time-series analysis, sparse statistics, explainable A.I. (XAI), causal inference, general applications of AI in healthcare.

EDUCATION

SRM University, Chennai, Tamil Nadu, India

Bachelors in Technology, Computer Science and Engineering (July 2013 - June 2017)

- CGPA: 9.4/10

Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

Special Student, EECS (September 2015 - May 2016)

- CGPA: 3.4/5
- Relevant Subjects: Artificial Intelligence, Machine Learning

RELEVANT WORK EXPERIENCE

Fuji Xerox Co., Ltd. - R&D HQ, Yokohama, Kanagawa, Japan

Researcher

September, 2018 - present

Part of the Recommendation Systems team in the Research and Technology Group. Responsibilities include researching sequence-aware recommender models and their interpretability. Also exploring the application of recommendation algorithms to healthcare problems to complement research at FujiFilm-BRAINS (healthcare research center).

Visiting Scholar

September, 2017 - July, 2018

Part of the Affective Computing team. Worked on Sentiment Analysis models their interpretability using NLP and Reinforcement Learning respectively. Also learned about orchestration frameworks for IoT devices and deployment of large scale Machine Learning models.

Voonik Technologies Pvt. Ltd. - R&D, Bangalore, Karnataka, India

Research Intern

December, 2016 - June 2017

Interned in the R&D team. Worked on creating a Real-time Recommender System from scratch, which was to be deployed to production for an initial user-base of 10,000 users. Project was successfully completed.

ACADEMIC PROJECTS

Massachusetts Institute of Technology - CSAIL

Independent Project - 6.100

March, 2016 - June 2016

Worked on an independent project while part of the Genesis group at MIT-CSAIL. Task was to frame a doctor-patient conversation (via telemedicine) such that it may be understood by the Genesis system. Experiments were conducted to explore the Genesis system's viability in a Clinical Decision Support setting, and as a artificial general intelligence (AGI) system.

- Advised by Professor Patrick Henry Winston.

SRM University - Dept. of Computer Science

Project Mecura

May, 2014 - May 2015

Initiated a new project for developing a local Electronic Medical Recordkeeping System for use in SRM Hospital. Coordinated a team of 10 members to successfully design a website and back-end system for storing patient health record information for easy access. Learned about privacy challenges in healthcare and basic entrepreneurship.

PUBLICATIONS	<p>Janmajay Singh, Oshiro Kentaro, Raghava Krishnan, Masahiro Sato, Tomoko Ohkuma and Noriji Kato. 2019. Utilizing Informative Missingness for Early Prediction of Sepsis. International Conference in Computing in Cardiology 2019 (<i>CinC '19</i>). [Accepted]</p> <p>Masahiro Sato, Janmajay Singh, Sho Takemori, Takashi Sonoda, Qian Zhang and Tomoko Ohkuma. 2019. Uplift-based Evaluation and Optimization of Recommenders. ACM Conference on Recommender Systems (<i>Recsys '19</i>). [Accepted]</p>
ONGOING RESEARCH	<p>Janmajay Singh, Masahiro Sato, Tomoko Ohkuma. Study of Long-term User Preference Dynamics in Recommendation Systems.</p> <p>Janmajay Singh, Masahiro Sato, Tomoko Ohkuma. Study of methods to impute missingness patterns in healthcare data.</p>
OTHER EDUCATION	<p>MITx - MicroMasters, edx.org</p> <p>Statistics and Data Science (MITx - SDS) (Expected January 2020)</p> <p>Indian Institute of Management, Lucknow, Uttar Pradesh, India</p> <p>4-week internship to learn Data Science and Analytics using R. (August 2017)</p>
COMPUTER SKILLS	<ul style="list-style-type: none"> • Languages: Python, R, Java, C++, bash scripting. • Databases and Tools: MySQL, PostgreSQL, MongoDB, Neo4j, Kafka