Meghanath Macha

INFO

MAILING ADDRESS:	Apartment 8, 3 Bayard Road, Pittsburgh, PA 15213
BORN:	28th July 1992
PHONE:	+14124820350
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WEBSITE:	https://mmacha.github.io/
SCHOLAR:	Google Scholar , Justia Patents
LANGUAGES:	English, Hindi and Telugu.

RESEARCH INTERESTS

I am primarily interested in developing methods to improve the interpretability of machine learning models. I build upon methods from Data mining, Machine learning and Optimization literature. My secondary interests lie in developing descriptive tools for a marketer to enrich the targeting of sales campaigns.

EDUCATION

AUGUST 2016 - PRESENT	Doctor of Philosophy in INFORMATION SYSTEMS AND MANAGEMENT Carnegie Mellon University, Pittsburgh.
COURSES	Machine Learning, Statistics, Convex Optimization Data mining, Econometrics (All Ph.D level)
AUGUST 2009 - 2014	Masters and Bachelors of Science in MATHEMATICS AND COMPUTING Indian Insititute of Technology, Kharagpur , India INSTITUTE SILVER MEDALIST

AWARDS

1. **Suresh Konda Award** for best first research paper at Heinz, CMU.

2. **PwC Presidential Fellowship** for outstanding research and academic performance at CMU.

3. **Institute Silver Medal** for holding the highest GPA in my department during 2009-14.

4. **Professor K.L. Chopra award** for the best demonstrable Master's project at IIT Kharagpur.

5. **Best poster award** for the Machine Learning course project titled 'Detecting Fraudulent Reviews'.

PROFESSIONAL EXPERIENCE

MAY 2018 - AUGUST 2018	APPLIED SCIENTIST INTERN, AWS AI Labs, Amazon, Seattle. Worked on developing active learning techniques for the record linkage problem. Working paper under progress.
MAY 2017 - AUGUST 2017	DATA SCIENCE INTERN, Data Science Lab, Adobe, San Jose. Worked on click-fraud detection which involved identifying fraudulent publishers and users. Paper to appear in ECML PKDD 2018.
JUNE 2014 - JULY 2016	MEMBER OF RESEARCH STAFF, Digital Marketing Research, Adobe, India. Developed predictive, descriptive tools for marketers to efficiently target and evaluate marketing campaigns. Published three conference papers and six patents.

RESEARCH PUBLICATIONS AND PATENTS

JOURNAL PUBLICATIONS:

1. **Meghanath Macha**, and Leman Akoglu, "X-PACS: Explaining Anomalies by Characterizing Subspaces." Data Mining and Knowledge Discovery Special Issue.

Conference Publications:

1. **Meghanath Macha**, Deepak Pai and Leman Akoglu, "ConOut : Contextual Outlier Detection : An Application to Ad Fraud" (To appear in ECML PKDD 2018 conference proceedings)

2. Atanu Sinha, **Meghanath Macha** , Pranav Manirekar, Sopan Khosla, Avani Samdhariya and Navjot Singh, "Anti-Ad Blocking Strategy: Measuring its True Impact". Proceedings of the 2017 AdKDD and TargetAd Workshop.

3. **Meghanath Macha**, Shiv Kumar Saini, and Ritwik Sinha, "Non-parametric Approach to the Multi-channel Attribution Problem" International Conference on Web Information Systems Engineering. Springer International Publishing, 2015.

4. Pai, Deepak, Abhijit Sharang, **Meghanath Macha**, and Shradha Agrawal, "Modelling Visit Similarity Using Click-stream Data: A Supervised Approach." International Conference on Web Information Systems Engineering. Springer, 2014.

Patents:

1. **Meghanath Macha**, Shiv Kumar Saini, Ritwik Sinha, "Value Function-based Estimation of Multi-channel Attributions" (Published)

2. **Meghanath Macha**, Ritesh Noothigattu, Shivam Garg, Abhishek Kandoi, Dr. Atanu Sinha, "Buying Stage Determination in a Digital Medium Environment." (Published)

3. **Meghanath Macha**, Ritwik Sinha, Shiv Kumar Saini, "Simulation-based Evaluation of a Marketing Channel Attribution Model." (Published)

4. Deepak Pai, Abhijit Sharang, **Meghanath Macha**, Shradha Agrawal, "Visitor Session Classification Based on Clickstreams" (Published)

5. Atanu Sinha, Sopan Khosla, Pranav Ravindra Maneriker, **Meghanath Macha**, Avani Samdariya and Navjot Singh, "A Method to Quantify True Effectiveness of Site-Wide Actions Using a Control Group Mechanism." (Filed)

6. **Meghanath Macha**, Moumita Sinha, Kokil Jaidka, "Conversational Index for Email Marketing Campaigns." (Published)

7. Leman Akoglu and **Meghanath Macha**, "Explaining Anomalies by Characterizing Subspace Rules." (Filed)

PRESENTATIONS

1. PRESENTER: **Learning Online Session Similarities**, Adobe Tech Summit, San Francisco, 2015

2. LAB INSTRUCTOR: **From Data to Insights**, Adobe Marketing Summit, Salt Lake City, 2015.

3. PRESENTER: **Modelling Visit Similarity Using Click-stream Data: A Supervised Approach**, 15th International Conference on Web Information and System Engineering (*WISE*) 2014, Thessaloniki, Greece.

SKILLS AND COURSEWORK

PROGRAMMING LANGUAGES	Python (4/5), R (4/5), C++ (3.5/5), Matlab (4/5)
COURSE PROJECTS	Detecting Fraudulent Reviews (Machine Learning)
	Portrayal of a fraudster (Data Mining)
	Recommending Bundles in Consumer-Product Networks (Convex Optimization)

ACTIVITIES

INTERNSHIP MENTOR, Digital Marketing Research, Adobe, India.
Mentored a group of three students at Adobe over the summers of 2015 and 2016 on a research project.

HALL PRESIDENT, IIT Kharagpur, India.
Presided over all the hall activities of over 250 students during my senior year.

REFERENCES

Available on request