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Professional Experience

2017–2020 **Tata Research Development and Design Centre, Pune, India**,
TCS Research.
Researcher, CyberSecurity and Privacy

Education

Feb 2020– **University of Zürich, Switzerland**,
Institute of Informatics (DDIS group), PhD.
GPA –

2015–2017 **University of Hyderabad, Hyderabad, India**,
Artificial Intelligence, Master of Technology.
GPA – 9.25/10

2010–2014 **Government Engineering College, Palakkad, India**,
Computer Science and Engineering, Bachelor of Technology.
GPA – 8.17/10

Publications

2019 **Rosni K V**, Manish Shukla, Vijayanand Banahatti, and Sachin Lodha. *Consent Recommender System: A Case Study on LinkedIn Settings*, Privacy-Enhancing Artificial Intelligence and Language Technologies (PAL), AAAI Spring Symposium Series

2017 Vidyadhar Rao, **Rosni K V**, Vineet Padmanabhan. *Divide and Transfer: Understanding Latent Factors for Recommendation Tasks*, RecSysKTL Workshop @ ACM RecSys

Research Projects

2020 **Adversarial attacks and defenses in machine learning**, *TCS Innovation Labs, TRDDC, Pune, India*.
Despite the success of machine learning algorithms in the cybersecurity application domain, the security of these algorithms poses a serious threat. This works focused on developing different data poisoning attacks against machine learning classifiers. Moreover, defensive strategies for the attacks are developed.

2018 **Consent Recommender System**, *TCS Innovation Labs, TRDDC, Pune, India*.
Due to new privacy regulations and laws, enterprises are required to get consents from users entailing variety of purposes. This may lead to consent fatigue as user is now expected to provide informed consent for each associated purpose. The consent fatigue in user can lead to either incorrect decision making or opting for default values provided by the enterprise, and thus, defeating the purpose of new data privacy regulations. In this work, we discuss the factors influencing the informed consent of a data-subject. Further, we propose a 'consent recommender system' based on Factorization Machines (Fms) to assist the data-subject and thereby avoiding consent fatigue.
  ○ Patent Filed in India, EPO and US

2017 **Cross Domain Recommender System**, *M.Tech Project, University of Hyderabad and TRDDC Pune, India*.
We proposed a collaborative filtering technique that can effectively utilize the user preferences and content information. In this approach, we follow a divide and transfer strategy that could derive semantically meaningful latent factors and utilize only the appropriate components for recommendations. We demonstrate the effectiveness of our approach due to improved latent feature space in both single and cross-domain tasks.

2014 **An optimized approach for lip reading using eigen vector method**, *B.Tech Project*, *Government Engineering College, Palakkad, India*.

To make the machine recognize lip movements which speak some meaningful words is possible means to let the human-computer interaction in a natural way. The main objective of this work is to recognize the spoken English words from real-time video.

2013 **Lesk approach in WSD for better e-learning using map-Reduce**, *B.Tech Project*, *Government Engineering College, Palakkad, India*.

The project primarily aims to develop a framework for semantic analysis of data using map-reduce paradigm and context retrieval. The main objective was implementation of Lesk algorithm to disambiguate the raw content and study the Hadoop framework and execute the work as a standalone operation and also in a pseudo distributed mode. *WSD - Word Sense Disambiguation*

Research Interests

- Machine Learning
- Data Analysis
- Information Retrieval
- Adversarial Machine Learning
- Security and Privacy
- Explainable AI

Achievements and Activities

2018 **IELTS Band 7.0**, *English Language Proficiency*.

2018 **Subreviewer**, *IEEE Punecon*.

2017 **First Class with Distinction**, *M.Tech AI*.

2014 **First Class with Honours**, *B.Tech CSE*.

2014 **Recipient of *Best outgoing student of the year 2014***, *B.Tech CSE*.

2014 **Recipient of Best Project award**, *B.Tech CSE*.

2013 **Selection in IEEE Kites Project Expo 2k13**, *B.Tech CSE*.

Skills

Languages Python, R, C/C++, Matlab, Prolog and Haskell

Frameworks Scikit-learn, PyTorch, Tensorflow, RapidMiner, GNU Octave, Seaborn, NLTK, Gensim, Pyomo, LaTeX

WebD HTML/CSS, Python-flask

Utilities Anaconda, Git, Sublime Text, Jupyter Notebook, Rstudio

References

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