

Name of the Faculty	Area of Research (Systems/Networks/ Software Engineering/ Theory/Data Science)	Possible Topic of PhD Thesis
Swaroop Joshi	Software engineering	Accessibility and Assistive Technology in Computing Education
Snehanshu Saha	Data Science	Theory of Deep Learning/Non-convex Optimization: Bayesian Computations in Deep learning
Shubhangi Gawali	Software systems	Scheduling algorithms in real time systems
Ramprasad S. Joshi	1. Algorithms and Computation Theory 2. Natural Language Processing	1.1 Geometry of Local Search/ Discrete Linear Subset Problems/ Greedoids 1.2 Graph Embeddings in Metric Spaces and Applications to Geometry of Local Search 1.3 Spectral Graph Theory: Applications to Geometry of Local Search 2.1 Minimum Distortion Vector Embeddings for Indic Languages 2.2 Building Semi-automated Versatile Multilingual Corpora for Indic Languages
Swati Agarwal	1. Natural Language Processing 2. Social Computing (Social Media Analytics) 3. Social Network Analysis 4. Data Mining	Cross-lingual NLP, Knowledge Graphs, NLP for Computational Biology, Social Assisted Communication Networks
Kanchan Manna	Systems	Network-on-Chip based System Design & Test, Computer Architecture and Binary Program Analysis
Sravan Danda	Data Science	Computer Vision Algorithms for Computationally Constrained Devices
Surjya Ghosh	Systems, Data Science	Developing mental health monitoring and intervention system based on smartphone and wearable usage. The project aims at collecting smartphone and wearable interaction logs and developing neural network models to infer mental states.
Sanjay K. Sahay	Applied AI and Cryptography	XAI in malware detection; Physically unclonable function for authentication of devices in communication viz. drone, smart devices, etc.
TBD	Computer Architecture	Processor and Storage Architectures
TBD	IoT	Cyber Physical Systems for Healthcare