

**Vikram Ravindra, Ph.D.**  
Assistant Professor  
Department of Computer Science  
Department of Electrical and Computer Engineering (courtesy)  
University of Cincinnati

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<b>EDUCATION</b>	Purdue University, West Lafayette, USA <i>Ph.D., Computer Science</i>	2022
	Technical University Munich, Munich, Germany <i>M.Sc., Informatics</i>	2014
	Visvesvaraya Technological University, Belgaum, India <i>B.E., Computer Science and Engineering</i>	2011
<b>EXPERIENCE</b>	University of Cincinnati <i>Assistant Professor</i>	Aug 2022 - Present
	Lawrence Livermore National Labs <i>Graduate Scholar</i>	Feb 2020 - Jul 2020
	Purdue University <i>Graduate Research Assistant</i>	Aug 2015 - Jun 2022
	National Instruments R & D <i>Research Engineer</i>	Jan 2015 - Jun 2015
	German Aerospace Center <i>Research Assistant</i>	Oct 2013 - Aug 2014
	Technical University Munich <i>Research Assistant</i>	Oct 2012 - Jan 2013
	Indian Institute of Science <i>Project Assistant</i>	Jun 2011 - Jun 2012

**MENTORING** Monireh Taimouri (PhD Fall '22-Present), Rukmini Pisipati (MS Fall '22-present), Xingyu Chen (BS Fall '22-present), Xianren Zhang (BS Fall '22-present), Fanyi Kong (BS Fall '22-present), Tianxing Ma (BS Fall '22-present)

**TEACHING** Spring 2023 – CS5152/6052 Intelligent Data Analysis

**THESIS COMMITTEE** Akshata Upadhye (MS, Fall '22)

**BOOK CHAPTERS** Hasan Aktulga, **Vikram Ravindra**, Ananth Grama, and Sagar Pandit, *Machine Learning Techniques in Reactive Atomistic Simulations*, Lecture Notes in Energy: Machine Learning and its Application to Reacting Flows, Springer Open, 2023 (To Appear)

**CONFERENCE PAPERS** **Vikram Ravindra**, Geoffrey Sanders and Ananth Grama *Identifying Coherent Subgraphs in dynamic correlation brain networks*, IEEE International Conference on Image Processing 2021 (ICIP '21)

**Vikram Ravindra** and Ananth Grama, *De-anonymization Attacks on Neuroimaging Datasets*, SIGMOD/PODS International Conference on Management of Data, 2021 (SIGMOD '21)

**Vikram Ravindra** and Ananth Grama, *Characterizing Similarity of Visual Stimulus from Associated Neuronal Response*, International Joint Conference in Artificial Intelligence, July 2020 (IJCAI '20)

**Vikram Ravindra**, David F. Gleich, Huda Nassar and Ananth Grama, *Rigid Graph Alignment*, Eighth International Conference on Complex Networks and their Applications 2019 (ComplexNets '19)

Thomas Runkler and **Vikram Ravindra** *Fuzzy Graph Clustering based on Non-Euclidean Relational Fuzzy c-Means*, The 16th World Congress of the International Fuzzy Systems Association and the 9th Conference of the European Society for Fuzzy Logic and Technology 2015 (IFSA-EUSFLAT '15)

Claudio Castellini and **Vikram Ravindra** *A wearable low-cost device based upon Force-Sensing Resistors to detect single-finger forces* 5th IEEE RAS & EMBS International Conference on Biomedical Robotics and Biomechatronics 2014 (BIOROB '14)

**JOURNAL PAPERS** Chih-Hao Fang, **Vikram Ravindra**, Salma Akhter, Mohammad Adibuzzaman, Paul Griffin, Shankar Subramaniam, and Ananth Grama, *Analyzing Sepsis States: A Retrospective Study on Patients with Sepsis in ICUs*, PLOS Digital Health, 2022.

**Vikram Ravindra**, Huda Nassar, David F. Gleich, and Ananth Grama, *Aligning*

*Spatially Constrained Graphs*, IEEE Transactions on Knowledge and Data Engineering, 2022

**Vikram Ravindra**, Petros Drineas, and Ananth Grama, *Constructing compact signatures for individual fingerprinting of brain connectomes*, Frontiers in Neuroscience, 2021.

Shahin Mohammadi, **Vikram Ravindra**, David F. Gleich, and Ananth Grama *A Geometric Approach to Characterize the Functional Identity of Single Cells*, Nature Communications, 2018

**Vikram Ravindra** and Claudio Castellini *A comparative analysis of three non-invasive human-machine interfaces for the disabled* Frontiers in Neurobotics, Oct 2014

**PREPRINTS/IN REVIEW** **Vikram Ravindra**, Chih-Hao Fang, and Ananth Grama, *Reconstructing visual features from fMRI of Naturalistic Viewing*, 2022 [In review]

**Vikram Ravindra**, and Ananth Grama, *Identification of task-specific subgraphs in brain networks*, 2022 [In review].

Chih-Hao Fang, **Vikram Ravindra**, Ananth Grama, Jose Davila-Velderrain, and Shahin Mohammadi *A Novel Approach to Archetypal Analysis*, 2021 [In Review]

**MISC PUBLICATIONS** [Doctoral Thesis] **Vikram Ravindra** *Computational Methods to Analyse Functional Connectomes*

[Masters Thesis] **Vikram Ravindra** *Comparison of Human Machine Interfaces for Advanced Hand Prosthetics*, DLR-IB 572-2014/19, 2014

[Workshop] **Vikram Ravindra**, Aditya Prakash, SVR Anand and Malati Hegde *Implementation of throughput enhancing client-AP association scheme On a WLAN controller*, COMSNETS-WISARD 2011.

## **TECHNICAL COMPETENCE**

- *Scripting Languages*: MATLAB, Python, Julia, Shell, Awk, Perl
- *Programming Languages*: C++, Java
- *Operating Systems*: Linux/Unix, Android (Basic)

## **TALKS**

- 2022 – *Computational Methods to Analyse Functional Connectomes*, NEC Laboratory
- 2022 – *Computational Methods to Analyse Functional Connectomes*, Purdue University

- 2022 – *Computational Methods to Analyse Functional Connectomes*, University of South Florida
- 2022 – *Computational Methods to Analyse Functional Connectomes*, University of Cincinnati
- 2021 – *Computational Methods to Analyse Functional Connectomes*, University of Kentucky
- 2021 – *Computational Methods to Analyse Functional Connectomes*, Montana State University
- 2021 – *Computational Methods to Analyse Functional Connectomes*, Procter and Gamble
- 2021 – *Identifying Coherent Subgraphs from dynamic brain networks*, ICIP 2021
- 2021 – *De-anonymization Attacks on Neuroimaging Datasets*, SIGMOD 2021
- 2020 – *Discriminating Human Connectomes*, Amazon
- 2021 – *Characterizing Similarity of Visual Stimulus from Associated Neuronal Response*, IJCAI 2020
- 2019 – *Discriminating Human Connectomes*, Regentrief Center for Healthcare Engineering
- 2018 – Reading Group Talk *Adaptive and Volume Sampling*, Dept of Computer Science, Purdue University
- 2015 – Reading Group Talk *Analysis of Random Fourier Features*, Dept of Computer Science, Purdue University
- 2014 – Seminar *Human Machine Interfaces for Advanced Hand Prosthetics* in German Aerospace Center, Munich
- 2013 – Seminar *ISIS 2.0: Prediction of Interaction Sites in Proteins*, Rostlab, TU Munich, Munich
- 2013 – Seminar *Adversarial Machine Learning*, Technical University Munich
- 2011 – Seminar *Association Policy for Centralized Wireless Controllers*, Indian Institute of Science
- 2011 – *Implementation of throughput enhancing client-AP association scheme On a WLAN controller* – COMSNETS-WISARD 2011

## SERVICE

- Program Committee: SIAM Symposium on Data Mining (SIAM SDM) 2023
- Conference Reviewer: International Conference on Parallel Processing (ICPP) 2019, 2021, 2022; International Conference on Robotics and Automation (ICRA) 2023
- Journal Reviewer: Human Brain Mapping (Wiley Press), Parallel Computing (Elsevier), Neuroscience Informatics (Elsevier), Neural Networks (Elsevier), Network Neuroscience (MIT Press)
- Editorial Board: Frontiers in Neuroimaging (Review Editor)

- Panel Member: SIGMOD/PODS Conference on Management of Data (SIGMOD) 2021

## **AWARDS**

- NSF Center for Science for Information Scholar
- Regenstrief Centre for Healthcare Engineering Grant
- Karnataka State Council for Science and Technology Grant

## **MEMBERSHIP**

- Association for Computing Machinery
- Institute of Electrical and Electronics Engineers

## **INDUSTRY CERTIFICATES**

- Sun Certified Java Professional
- Google Project Management: Professional Certificate
- Professional Scrum Master (PSM I, PSM II)
- Professional Scrum Product Owner (PSPO I, PSPO II)

## **REFERENCES**

Prof. Ananth Grama	Purdue University	ayg@cs.purdue.edu
Prof. Petros Drineas	Purdue University	pdrineas@purdue.edu
Prof. David Gleich	Purdue University	dgleich@purdue.edu
Dr. Geoffrey Sanders	LLNL	sanders29@llnl.gov