

Research: Graph-based Learning and Reinforcement Learning
Webpage: <https://priyeshv.github.io> | Gitpage: <https://github.com/priyeshv>
Email: priyesh@hotmail.co.in | Ph: +1-514-967-7402

EDUCATION

PHD IN CS, MCGILL UNIVERSITY & MILA| 2019 - PRESENT

Research Advisor: Doina Precup

MS BY RESEARCH (THESIS) IN CSE, INDIAN INSTITUTE OF TECHNOLOGY MADRAS| 2015 - 2019

Research Advisor: Balaraman Ravindran

BE IN CSE, ANNA UNIVERSITY CHENNAI| 2009 - 2013

EXPERIENCE

ROBERT BOSCH CENTRE FOR DATA SCIENCE AND AI, DEPT. OF C.S.E, IIT MADRAS

Project Officer: Feb'19 - June'19 & Project associate: Aug'17 - Jan'19 | Supervisor: Prof. Balaraman Ravindran

Project: Network Representation Learning | An IITM-Intel Collaboration

- Built a Network Representation Learning toolkit for both attributed and non-attributed graphs.

R.I.S.E LAB, DEPT. OF C.S.E, IIT MADRAS

Project Associate: July'14 - Aug'17 | Supervisor: Balaraman Ravindran

Project: Wafer data inspection | An IITM-KLA Tencor Collaboration

- Worked on extreme multi-class class-imbalance classification problem to detect defects in semi-conductor wafers.
- Proposed multi-view semi-supervised and active learning strategies to overcome the limited labeled data setup.
- Designed CNNs based shared representation learning architectures to embed Optical and Electron-Microscope Images.

ERICSSON RESEARCH

Research Intern: June'13 - June'14 | Supervisor: Shivashankar Subramanian

- Worked on learning from heterogeneous data sources and built alarm prediction models for Telecom data.

GLOBAL OPERATIONS TEAM | PAYPAL

Intern: Dec'11 | Supervisor: Ms. Bhaduri Raju Naidu

- Developed a web application tool with J2EE and MYSQL for Resource mapping and Reporting

PUBLICATIONS

SCALING GRAPH PROPAGATION KERNELS FOR PREDICTIVE LEARNING

FRONTIERS IN BIG DATA, SECTION DATA MINING AND MANAGEMENT, FRONTIERS 2022

P Vijayan, Y Chandak, M Khapra, S Parthasarathy & B Ravindran

SEMI-SUPERVISED DEEP LEARNING FOR MULTIPLEX NETWORKS

ACM SIGKDD CONFERENCE ON KNOWLEDGE DISCOVERY AND DATA MINING, KDD'21

A Mitra, P Vijayan, R Sanam, D Goswame, S Parthasarathy & B Ravindran

EGO-GNNS: EXPLOITING EGO STRUCTURES IN GRAPH NEURAL NETWORKS

INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, ICASSP'21

D Sandfelder, P Vijayan and W L Hamilton

INFLUENCE MAXIMIZATION IN UNKNOWN SOCIAL NETWORKS: LEARNING POLICIES FOR EFFECTIVE GRAPH SAMPLING [Best Paper Nominee]

INTERNATIONAL CONFERENCE ON AUTONOMOUS AGENTS AND MULTIAGENT SYSTEMS, AAMAS'20

H Kamarthi, P Vijayan, Bryan Wilder, B Ravindran & M Tambe

A UNIFIED NON-NEGATIVE MATRIX FACTORIZATION FRAMEWORK FOR SEMI-SUPERVISED LEARNING ON GRAPHS

SIAM INTERNATIONAL CONFERENCE ON DATA MINING, SDM'20

A Mitra, P Vijayan, S Parthasarathy & B Ravindran

UNDERSTANDING DYNAMIC SCENES USING GRAPH CONVOLUTION NETWORKS

INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS, IROS'20

S Mylavarapu, M Sandhu, P Vijayan, M Krishna, B Ravindran, and A Namboodiri

TOWARDS ACCURATE VEHICLE BEHAVIOUR CLASSIFICATION WITH MULTI-RELATIONAL GRAPH CONVOLUTIONAL NETWORKS

INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS, IROS'20
S Mylavarapu, M Sandhu, P Vijayan, M Krishna, B Ravindran, and A Nambodiri

ON INCORPORATING STRUCTURAL INFORMATION TO IMPROVE DIALOGUE RESPONSE GENERATION

NLP FOR CONVERSATIONAL AI WORKSHOP, ACL'20
N Moghe, P Vijayan, B Ravindran, and M Khapra

NETWORK REPRESENTATION LEARNING: CONSOLIDATION AND RENEWED BEARING

ARXIV:1905.00987
P Vijayan*, S Gurukar*, A Srinivasan, G Bajaj, C Cai, M Keymanesh, S Kumar, P Maneriker, A Mitra, V Patel, B Ravindran & S Parthasarathy

F-GCN: FUSION GRAPH CONVOLUTIONAL NETWORKS

WORKSHOP ON MINING AND LEARNING WITH GRAPHS, KDD 2018 | ARXIV:1805.12528
P Vijayan, Y Chandak, M Khapra, S Parthasarathy & B Ravindran

MULTI-LABEL COLLECTIVE CLASSIFICATION IN MULTI-ATTRIBUTE MULTI-RELATIONAL NETWORK DATA

IEEE/ACM ADVANCES IN SOCIAL NETWORK ANALYSIS AND MINING, ASONAM'14
P Vijayan, S Subramanian & B Ravindran

PATENTS

USER CATEGORIZATION IN COMMUNICATIONS NETWORKS | UNITED STATES 20150236910
Work done during internship at Ericsson R&D | Collaborator: Shivashankar Subramanian

AWARDS AND RECOGNITION

OUTSTANDING REVIEWER: ICLR'20
GRADUATE EXCELLENCE AWARD | 2020,2021
McGill School of Computer Science Ph.D. Fellowship
PANICKER AWARD | 2011-2012
Best pre-final year undergraduate across all departments.

TALKS, CONFERENCES & SUMMER SCHOOLS

INVITED TALKS TRANSITION FROM MACHINE LEARNING -> DEEP LEARNING (MLDLTISP'18), S.V.C.E | 2018
3RD RBCDSAI WORKSHOP ON RECENT PROGRESS IN DATA SCIENCE AND AI | 2018
THINK LIKE A STARTUP SERIES, IITM INCUBATION CELL | 2016

PRESENTATIONS REPRESENTATION LEARNING WORKSHOP, NEURIPS'19
EIGHTH STATISTICAL RELATIONAL LEARNING WORKSHOP, IJCAI 2018
RBC-DSAI WORKSHOP ON RECENT PROGRESS IN DATA SCIENCE & AI, IITM | 2017

MICROSOFT SUMMER SCHOOL ON MACHINE LEARNING, IISC | 2015

DEEP LEARNING SUMMER SCHOOL, IIIT-H | 2016

TEACHING

TEACHING ASSISTANT: INF8953DE: REINFORCEMENT LEARNING (FALL'21)
COMP596-001: NETWORK SCIENCE (FALL'20)
COMP598-001: INTRODUCTION TO DATA SCIENCE (FALL'20)
COMP767-001: GRAPH REPRESENTATION LEARNING (WINTER'20)
ACM INDIA SUMMER SCHOOL ON DATA SCIENCE (2018)

MISC

PROGRAM COMMITTEE MEMBER: EMNLP'21, SDM'21, GCLR WORKSHOP AAAI'21, NAACL-HLT'21, ADCOM'18, CoDs-COMAD'18

REVIEWER: NEURIPS: 2021-2022, ICLR: 2020-2022, NAACL'21, ICLR'20, DMKD JOURNAL, ACL'19

SUB-REVIEWER: AAAI'17, CODS'17 & DSAA'15

FIRST RUNNER UP - IBM THE GREAT MIND TECH QUIZ | 2011 | REGIONAL

CHAIRPERSON | SVCE-ACM STUDENT CHAPTER | 2012-2013