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Education

- **University of Massachusetts Amherst** — Amherst, MA
  MS/PhD in Computer Science — *2017 - present*
  - GPA: 4.0/4.0
  - Relevant coursework: Advanced Algorithms, Advanced Software Engineering, Machine Learning, Programming Languages
- **Indian Institute of Technology Madras** — Chennai, India
  B.Tech in Computer Science and Engineering — *2010 - 2014*
  - GPA: 8.8/10
  - Relevant coursework: Introduction to Machine Learning, Artificial Intelligence, Natural Language Processing, Social Network Analysis, Basic Graph Theory, Decision Models, Fundamentals of Operations Research
- **FIITJEE Junior College** — Hyderabad, India
  Class XII — *2008 - 2010*
  - Percentage: 97.9
  - Relevant subjects: Mathematics, Physics and Chemistry

Professional Experience

- **University of Massachusetts Amherst** — Amherst, MA
  Research and Teaching Assistant — *2017-present*
  - Working as a research assistant with Prof. Hong Yu on applications of machine learning in healthcare. Also worked as a research assistant with Prof. Yuriy Brun and Prof. Arjun Guha on formal verification of software.
  - Teaching assistant for Artificial Intelligence - COMPSCI383 with Prof. Philip Thomas
- **Epic Systems Corporation** — Madison, WI
  Software Developer — *2015-2017*
  - Part of the R&D team that works on the Ambulatory Software for the Epic Software Suite.
  - Lead developer/owner for Lifetime, a visual and interactive display of a patients lifetime clinical data like physician encounters, problems and medications.
  - Owner for Growth Charts module.
- **IBM Research India** — Bangalore, India
  Research Software Engineer — *2014 - 2015*
  - Worked with Watson, Cognitive Research, and Smarter Planet Solutions teams on a number of research problems, both in-house and for clients.
  - Published work in COMSNETS, SmartGridComm, IEEE-ISGT and IKDD-CODS

- **Advanced Technical Labs, Adobe Systems Inc.** Bangalore, India
  Research Intern *2013*
  - Developed a privacy-preserving web analytics solution based on Elliptic Curve Cryptography.
  - Implemented the back-end analytics monitor in Python, and built a browser plug-in, web framework to demonstrate the process in real time.

Publications

- **Learning Latent Space Representation with Correlational Neural Network to Predict Patient Outcomes using Electronic Health Records**
  Subendhu Rongali & Hong Yu
  Proceedings of 3rd International workshop on Biomedical Informatics with Optimization and Machine Learning at IJCAI 2018

- **Taxonomy grounded aggregation of pre-trained flat classifiers**
  Amrita Saha, Sathish Indurthi, Shantanu Godbole, Subendhu Rongali & Vikas C. Raykar
  Initially under consideration at the 19th International Conference on Artificial Intelligence and Statistics (AISTATS 2016)
  `https://arxiv.org/pdf/1512.00355.pdf`

- **iPlug: Decentralized Dispatch of Distributed Generation**
  Subendhu Rongali, Tanuja Ganu, Manikandan Padmanabhan, Vijay Arya, Shivkumar Kalyanaraman & Mohamad Iskandar Petra
  To appear in Proceedings of 8th International Conference on Communication Systems and Networks (COMSNETS 2016)

- **From Multiple Views to Single View: A Neural Network Approach**
  Subendhu Rongali, Sarath Chandar A P & Balaraman Ravindran
  Proceedings of 2nd ACM-IKDD Conference on Data Sciences 2015

- **A context vector regression based approach for demand forecasting in district heating networks**
  Subendhu Rongali, Anamitra R Choudhury, Vikas Chandan, Vijay Arya
  Innovative Smart Grid Technologies-Asia (ISGT ASIA), 2015 IEEE, 1-6

- **Estimating return on investment for grid scale storage within the economic dispatch framework**
  Kalyan Dasgupta, Jagabondhu Hazra, Subendhu Rongali, Manikandan Padmanaban
  Proceeding of Innovative Smart Grid Technologies-Asia (ISGT ASIA), 2015 IEEE, 1-6

- **A Socially Aware Incentive Strategy for Encouraging Residential Solar Uptake in Brunei**
  Harshad Khadilkar, Pratyush Kumar, Subendhu Rongali, Sampath Dechu & Mohamad Iskandar Petra
  Proceedings of 6th IEEE International Conference on Smart Grid Communications (SmartGridComm 2015)

Current Projects

- **Safe and interpretable machine learning in healthcare**
  Work in collaboration with Prof. Hong Yu.
  Projects include predictive modelling, safe RL, and medical knowledge graphs.

- **Automatic proof completion and repair**
  Work in collaboration with Prof. Yuriy Brun, Prof. Arjun Guha, and Emily First.
  We leverage language models to model the formal verification langauge - Coq, and automatically construct proofs.

Skills

- **Programming Languages**
  Over 5000 lines: *C, C#, Python, Java* Over 1000 lines: *Coq, C++, Intersystems Cache*
  Familiar: *Lisp, Prolog, MySQL* Web programming: *HTML, CSS, JavaScript*

- **Machine Learning**
  Python frameworks: *Pytorch, Caffe, Pandas, Scikit, Theano, Tensorflow*
  Other: *MATLAB, R*

Scholastic Achievements

All India Rank **174 in JEE, 434 in AIEEE** 2010
2nd position in **Reverse Coding, Ultimate Engineer** in IITM Technical Championship . 2013
Kishore Vaigyanik Protsahan Yojana (**KVPY**) scholar from Class XII 2009
School topper in Class XII Intermediate board and Class X CBSE board 2008,2010

Extra-curricular

Branch Councilor, Department of Computer Science and Engineering, IITM 2013-14
Part of the hostel **football** and **squash** teams - 3 medals in IITM Sports Championship 2010-14
Part of the **school football** team that finished 3rd in National Sainik School Championship 2007
National Best Cadet, NCC Junior Division at Annual NCC Republic Day Camp . . . 2007