

# Goutham Ramakrishnan

## Senior Machine Learning Software Engineer

📍 San Jose, CA

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🌐 goutham-ramakrishnan

## Experience

### Health at Scale Corporation

#### Senior Machine Learning Software Engineer

#### Machine Learning Software Engineer

- Developing machine learning and software systems for large scale healthcare data.

📍 San Jose, CA

📅 Mar'22 – Present

📅 Jun'20 – Feb'22

### Microsoft Research Cambridge

#### Researcher Intern

- Developed an end-to-end framework for discovering and versioning sensitive files across a project cycle, for easing data compliance in healthcare research (🔗 Link).

📍 United Kingdom

📅 Jun – Sep 2019

### American Express

#### Data Analyst Intern

- Analyzed customer data and isolated inefficiencies in existing manual underwriting procedures. Designed a unified global framework for manual underwriting.

📍 Gurugram, India

📅 May – Jul 2017

## Research

### Backdoors in Neural Models of Source Code

Goutham Ramakrishnan, Aws Albarghouthi

International Conference on Pattern Recognition (ICPR), 2022

🔗 Link

### Semantic Robustness of Models of Source Code

J Henkel\*, G Ramakrishnan\*, Z Wang, A Albarghouthi, S Jha, T Reps

Conference on Software Analysis, Evolution and Reengineering (SANER), 2022

🔗 Link

### Towards Robustness to Label Noise in Text Classification

Siddhant Garg\*, Goutham Ramakrishnan\*, Varun Thumbe\*

Conference on Information and Knowledge Management (CIKM), 2021

🔗 Link

### BAE: BERT-based Adversarial Examples for Text Classification

Siddhant Garg\*, Goutham Ramakrishnan\*

Conference on Empirical Methods in NLP (EMNLP), 2020

🔗 Link

### Synthesizing Action Sequences for Modifying Model Decisions

Goutham Ramakrishnan\*, Yun Chan Lee\*, Aws Albarghouthi

Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI), 2020

🔗 Link

### Interpretable Inference Graphs for Face Recognition

Siddhant Garg\*, Goutham Ramakrishnan\*, Varun Thumbe

Conference on Image and Vision Computing New Zealand (IVCNZ), 2019

🔗 Link

### Fast GPU-Enabled Color Normalization for Digital Pathology

Deepak Anand\*, Goutham Ramakrishnan\*, Amit Sethi

Conference on Systems, Signals and Image Processing (IWSSIP), 2019

🔗 Link

## Projects

### Towards Compliant Data Management Systems for Healthcare ML

Goutham Ramakrishnan, Aditya Nori, Hannah Murfet, Pashmina Cameron

Preprint – Nov 2020

🔗 Link

### Advances in Quantum Deep Learning: An Overview

Siddhant Garg\*, Goutham Ramakrishnan\*

Preprint – May 2020

🔗 Link

\*Equal Contribution by Authors

## Education

### M.S in Computer Sciences

#### University of Wisconsin–Madison

📅 Aug 2018 - May 2020 GPA: 4.0/4.0

### B.Tech in Electrical Engineering

#### Indian Institute of Technology Bombay

📅 Jul 2014 - May 2018 GPA: 9.29/10.0

## Technical Skills

Python

C++

MATLAB

SQL

PyTorch

TensorFlow

PySpark

Keras

Django

Git

LaTeX

## Coursework

Machine Learning

Reinforcement Learning

Mathematical Foundations of ML

Security and Privacy for ML

Data Management for ML

Deep Learning in Computer Vision

Natural Language Processing

Data Structures and Algorithms

Operating Systems

Discrete Structures

Nonlinear Optimization

## Achievements

- Academic Service:** Reviewer for
  - EMNLP'21, EMNLP'22
  - Algorithmic Recourse Workshop at ICML'21
- Member of **Winning Team:** Microsoft Hackathon (UK) – Summer 2019
- Institute Student Mentor, IIT-Bombay (Apr 2017 - May 2018)
- Institute Football Convener, IIT-Bombay (May 2015 - April 2016)
- Silver Medalist** in Soccer at the 51st Inter-IIT Sports Meet, Kanpur - 2016
- All India Rank 959 in JEE Advanced 2014

## Other

- Teaching Assistant:**
  - CS 301 (Data Programming) Fall 2018, UW-Madison
  - MA 207 (Differential Equations) Fall 2016, IIT-Bombay
- Volunteering:** Tutored underprivileged students at Abhyasika, Mumbai