

# Ram Ramrakhya

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## EDUCATION

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- **Georgia Institute of Technology** *August 2021 - Present*  
Masters in Computer Science
- **Pune Institute of Computer Technology, Pune** *July 2015 - June 2018*  
Bachelors of Engineering, Information Technology GPA: 4.00

## PUBLICATIONS

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- **Fabrik: An online collaborative neural network editor** October 2019  
*ACM SOSP'19, Systems for ML workshop*  
Utsav Garg, Viraj Prabhu, Ram Ramrakhya, Deshraj Yadav, Dhruv Batra, Harsh Agarwal

## EXPERIENCE

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- **Machine Learning and Perception Lab, Georgia Tech** April 2020 - July 2021  
*Research Intern advised by Prof. Dhruv Batra and Prof. Devi Parikh*
- **Habitat-on-Web:** This work focuses on training embodied agents for tasks that require visual exploration. We ask the question - how well does behavior cloning work for such tasks. Towards this we build a scalable web infrastructure collect task demonstrations. We use the collected data to train policies via behavior cloning, and investigate how these policies compare to their RL-trained counterparts.
- **InMobi** June 2018 - August 2020  
*Software Development Engineer 2*
  - Worked at the intersection of Machine Learning and Software Engineering. Implemented incremental caching layer to optimize latency, data pipelines for processing large scale analytics data, and content recommendation algorithm and infrastructure to serve content in real time.
- **Google Summer of Code** April 2018 - August 2019  
*Student Developer, Organisation Mentor, Organisation Administrator*
  - **2018:** Selected as GSoC student to build Fabrik, an online collaborative platform to build, visualize and train deep learning models via a simple drag-and-drop interface.
  - **2019:** Mentored students during GSOC - one of the most prestigious open source program sponsored by Google - for CloudCV.
- **Google Code In** October 2018 - January 2019  
*Organisation Mentor*
  - Mentored more than 10 students during GCI - one of the most prestigious programming competition to introduce pre-university students to open source community sponsored by Google - to contribute to CloudCV.
- **InterviewBit** January 2018 - June 2018  
*Software Engineering Intern*
  - Designed and implemented SQL programming language judge, machine learning solution evaluation platform and dashboard for interview pipeline on the InterviewBit platform.

- **NVIDIA**

July 2017 - May 2018

*System Software Engineering Intern*

- Worked on building a platform to design automated test suites for NVIDIA's video encoders and decoders.

## FELLOWSHIP AND AWARDS

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- Travel scholarship for **Google Code-In Grand Prize Summit 2018**
- University **Rank 1** in 3rd Academic Year, University of Pune
- Institute **Rank 2** in 2nd & 4th Academic Year, Pune Institute of Computer Technology

## SELECTED PROJECTS

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- **EvalAI** [[evalai.cloudcv.org](https://evalai.cloudcv.org)]
  - Open source platform to create, collaborate and participate in the AI Challenges organized around the globe; **70+ open source contributors; 1700+ issues & pull requests; 450+ stars; 200+ forks**
- **Fabrik: An Online Collaborative Neural Network Editor**
  - Online collaborative platform to build, visualize and train deep learning models via a simple drag-and-drop interface; **30+ open source contributors; 850+ stars; 170+ forks**
- **Conditional Variational AutoEncoder GAN**
  - A simple extension of VAEs that employs label conditioning to generate high quality images. By adding an auxiliary classifier to the discriminator of a VAE, it also predicts probability distribution over the class labels.
- **iMet Collection FGVC6 - ICCV'19 Challenge**
  - Built a fine grained visual categorizer for multi-label classification of artworks, 1000+ categories, from metropolitan museum of art using Squeeze-and-Excitation Networks with Focal loss to handle high class imbalance.
- **Glance Content Recommender**
  - A content recommendation system built using an ensemble of LightGBM and Deep + Shallow Neural Network. Built an end-to-end platform to train and deploy model in InMobi's existing infrastructure

## ACHIEVEMENTS

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- **Runners-up** of the **Habitat** challenge organized at **CVPR'21**
- **Ranked 8th/914** in **Kaggle's** Abstraction and Reasoning Challenge
- **Ranked 10th/1571** in Kaggle's **Google Quest QA Labelling** Challenge

## PROGRAMMING SKILLS

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- **Languages:** Python, C, C++, Java, Scala, Ruby, Javascript
- **Frameworks:** PyTorch, Tensorflow, Keras, Caffe, Django, Flask, PyTest, Celery
- **Distributed Systems:** Spark, Hive, Hadoop
- **DevOps:** Docker, Kubernetes, Amazon Web Services, Microsoft Azure Cloud