

Viraat Reddy Aryabumi

+91 9032489699

in linkedin.com/in/viraataryabumi

✉ viraat94@gmail.com

github.com/viraat viraataryabumi.info

EXPERIENCE	VP of Systems Intelligence Aiara Inc. • Leading ML to deliver value for manufacturers. Operate across all levels of the company. Machine Learning Scientist Amazon Development Centre Scotland • Worked in Sponsored Display, involved world-scale data systems, and deep learning models operating at low latency. • Delivered multiple experiments that led to double digit growth in the business. Owned the entire process from data collection to productionizing trained models. • Supported feature and product launches, improved operational reliability and visibility for the team. Improved knowledge sharing mechanisms and data sharing mechanisms. • Supervised 6 students from the University of Edinburgh pursuing MSc AI for their MSc thesis. Topics: Memory-Efficient Distributed Representations and Personalizing Recommendation Systems using text. AI Fellow Fellowship AI • Implemented 1-cycle learning policy to achieve 83.6% accuracy in Chest X-Ray disease classification. • Worked on improving fine-grained image classification results using selective pre-training of Networks. Coordinator Research Catalogue Technology Transfer Office, IIIT-H Foundation • Worked with faculty of 6 AI research centers to identify and develop technology projects with commercial potential. Compiled a research catalogue to facilitate technology transfer and establish relationships with industry. • Selected to take part in the 'Entrepreneur-in-residence' program. Market validation of 'Indic OCR' technology. Assistant Product Engineer Social Entrepreneurship Lab, Stanford University • Developed a low-cost, compact demonstration kit for the drip irrigation company Driptech. Development involved multiple design thinking cycles from need-finding to prototyping. Innovated the design for the production demo kit.	02/2022 - present 05/2019 - 02/2022 09/2018 - 12/2018 01/2017 - 08/2017 7/2014 - 9/2014
EDUCATION	University of Edinburgh MSc., Artificial Intelligence Stanford University Summer Session Intensive in Technology & Entrepreneurship Osmania University, Chaitanya Bharathi Institute of Technology Bachelor's of Engineering, Information Technology	08/2017 - 9/2018 Distinction 06/2016 - 08/2016 Grade: A 09/2012 - 05/2016 GPA: 4.0 Score: 80.2%
RELEVANT COURSES	Graduate: Machine Learning & Pattern Recognition, Machine Learning Practical, Computational Cognitive Neuroscience, HCI, Reinforcement Learning, Algorithmic Game Theory, The Human Factor, Decision Making in Robots Summer Session: Data Mining, Leading Trends in IT, Psychology of Technology, Sustainability Design Thinking Undergraduate: Data Structures, Discrete Mathematics, Probability & Random Processes, Software Engineering, Databases (DBMS), Operating Systems, AI, Design & Analysis of Algorithms, Distributed Systems Online: Machine Learning (Coursera), Learning how to learn, fast.ai	
RESEARCH	Thesis: Investigating Adversarially learning to achieve Fairness in Images[†] • Investigated Adversarial learning methods to obtain representations of images such that it is possible to predict a target attribute but difficult to predict a sensitive attribute. Experiments conducted on two synthetic datasets. Review: Learning to play video games using Deep Reinforcement Learning[†] • A review of recent advancements in the field of Deep Reinforcement Learning applied to video games in the ALE. Review: Model Based Reasoning becomes Automatic in humans with training[†] • Review of decision-making models in humans on the connect between model-based and model-free learning.	5/2018 - 8/2018 11/2017 - 1/2018 10/2017 - 12/2017
PROJECTS	Hindsight Experience Replay Informatics, University of Edinburgh • Implemented Hindsight Experience Replay and a bit flipping environment in PyTorch. Learning to play Super Mario Informatics, University of Edinburgh • Train an agent to play Super Mario Bros. in OpenAI Gym using deep reinforcement learning. Advanced Lane Finding Self Driving Nanodegree, Udacity • Implemented a software pipeline to identify the lane boundaries in a video using Computer Vision Techniques. Vehicle Detection Self Driving Nanodegree, Udacity • Implemented Tiny YOLOv2, a Deep learning based approach to detect vehicles in a video stream. Traffic Sign Image Classification Self Driving Nanodegree, Udacity • Classify traffic sign images using LeNet5 architecture. Augmented data to improve test accuracy to 91.75%. Identification of Crop Diseases Dept. of IT, CBIT • Identify crop diseases by extracting features from photos of leaves of the diseased crop. Implemented using a SVM.	5/2018 - 5/2018 8/2018 - present 1/2018 - 2/2018 1/2018 - 2/2018 12/2017 - 1/2018 7/2015 - 4/2016
COMPUTER SKILLS	Languages: Python, Java, L ^A T _E X Frameworks/Packages: PyTorch, Spark, Numpy, pandas, matplotlib, Keras, Tensorflow	
ACTIVITIES	• Won 2nd place at UnBias Hackathon 2018 • Core team member and contributing author of Skynet today : a website providing informed coverage of AI news • Represented the University of Edinburgh in British Universities & Colleges Sport Golf	

[†] unpublished