Akshit Arora

aroraakshit.github.io

Current Appointments

- 2019-now Senior Solutions Architect, NVIDIA, Santa Clara, CA, USA.
 - 2018 Software Engineer (Machine Learning) Intern, WOOTMATH, Boulder, CO, USA.
- 2015-2017 Research Intern, Applied Cognitive Science Lab, INDIAN INSTITUTE OF TECHNOLOGY (IIT), Mandi, HP, India.

Education

- 2017-2019 **M.S. in Computer Science**, *University of Colorado Boulder*, CO, USA. Capstone: Student Knowledge Tracing for online tutoring platforms using Deep Learning C
- 2013-2017 **B.E. in Computer Engineering**, *Thapar University*, Patiala, PB, India. Capstone: Interactive landslide simulator, a tool for landslide risk assessment and communication

Research Publications

- ICASSP 2024 Scaling NVIDIA's multi-speaker multi-lingual TTS systems with voice cloning to Indic Languages, *A Arora*, *R Badlani*, *S Kim*, *R Valle*, *B Catanzaro*, IEEE International Conference on Acoustics, Speech and Signal Processing 2024, Seoul, Korea
- ICASSP 2023 VANI: Very-lightweight Accent-controllable TTS for Native and Non-native speakers with Identity Preservation, *R Badlani*, *A Arora*, *S Ghosh*, *R Valle*, *KJ Shih*, *JF Santos*, *B Ginsburg*, *B Catanzaro*, IEEE International Conference on Acoustics, Speech and Signal Processing 2023, Rhodes Island, Greece Z.
 - EDM 2018 Does Deep Knowledge Tracing Model Interactions Among Skills?, S Montero*, A Arora*, S Kelly, B Milne, MC Mozer, Educational Data Mining 2018, Buffalo, NY .
- NHESS 2018 Learning in an interactive simulation tool against landslide risks: the role of strength and availability of experiential feedback, *P Chaturvedi*, *A Arora*, *V Dutt*, Natural Hazards and Earth System Sciences Journal C.
 - AHFE 2016 Interactive Landslide Simulator: A tool for Landslide Risk Assessment and Communication, *P Chaturvedi*, *A Arora*, *V Dutt*, Springer Applied Human Factors & Ergonomics 2016, Orlando, FL 2.

* = Equal Contribution

Invited Talks

- 2025 Level Up Your LLM Training: Resilient Training With NeMo NVIDIA GTC 2025 C
- 2024 Speaking in Every Language: A Quick-Start Guide to TTS Models for Accented, Multilingual Communication - NVIDIA GTC 2024
- 2020 Scalable Hyper-parameter Optimization using RAPIDS and AWS PyBay 2020
- 2020 Accelerating Machine Learning with GPUs AlCamp

Achievements

- 2024 Winner, Zero-Shot, Multi-speaker, Multi-lingual Indic Text-to-Speech with Voice Cloning Challenge, IEEE ICASSP 2024, Seoul, South Korea
- 2023 Winner, Lightweight, Multi-speaker, Multi-lingual Indic Text-to-Speech Challenge, IEEE ICASSP 2023, Rhodes Island, Greece
- 2018 **Outstanding Poster Award (MS)**, Department of Computer Science, University of Colorado at Boulder, CO, USA.

Media

- 2024 NVIDIA Speech and Translation AI Models Set Records for Speed and Accuracy NVIDIA Technical Blog
- 2024 NVIDIA Researchers Make Indic Al Model to Talk to their Spouses' Indian Parents Analytics India Magazine
- 2024 Speak Like a Native: NVIDIA Parlays Win in Voice Challenge NVIDIA News 🗹

Pro Bono Volunteering and Professional Activities

Technical Blogs

- 2025 Running NVIDIA NeMo 2.0 Framework on Amazon SageMaker HyperPod AWS Machine Learning (ML) Blog
- 2024 Accelerate your generative AI distributed training workloads with the NVIDIA NeMo Framework on Amazon EKS - AWS Machine Learning (ML) Blog
- 2024 Large scale training with NVIDIA NeMo Megatron on AWS ParallelCluster using P5 instances AWS High Performance Computing (HPC) Blog
- 2021 How to Deploy Riva at Scale on AWS with EKS NVIDIA Riva Documentation
- 2020 How to Guide: Using RAPIDS on JFrog Artifactory NVIDIA RAPIDS AI Blog C Reviewer
- 2024-now IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)
 - 2025 GPU Technology Conference (NVIDIA GTC), San Jose, CA 🗹
 - 2024 Academic Hardware Grant (NVIDIA)
 - 2019 Practical Deep Learning for Cloud, Mobile, and Edge, by Anirudh Koul, Siddha Ganju, Meher Kasam (O'Reilly)

Mentoring

- 2020-now Mentor UnsaidTalks, India.
 - 2023 Talk Navigating your path to a fulfilling career as an international student, Industry Speaker Series Fall 2023, University of Colorado Boulder
 - 2021 Podcast Path to Master's in Computer Science by Thapar University, PB, India 🗹
 - 2021 Podcast Balancing research and academia by Vishwas Narayan, India 🗹
 - 2021 Podcast Career in Data Science at NVIDIA by IIT Bombay, MH, India 🗹
- 2020-2021 Mentor FAANGPath (now CareerFlow.ai), San Francisco, CA, USA. 🗹
 - 2020 Hackathon Mentor at GPU Hackathon 2020, organized by Brookhaven National Lab, Santa Clara, CA, USA.
 - 2019 Graduate Peer Mentor University of Colorado at Boulder, CO, USA. C Volunteering
 - 2024 Friendship Line Volunteer Institute on Aging, San Francisco, CA, USA 🗹
 - 2019 Sponsor Logistics Coordinator PyBay 2019, San Francisco, CA, USA 🖾
- 2017-2019 **Teaching Assistant** for Introduction to Social Statistics, Introduction to Computer Science and Data Structures University of Colorado at Boulder, CO, USA
 - 2014 ACM International Workshop on Machine Learning Algorithms and Data Analytics, Thapar University, Patiala, PB, India