

ROHIT BANDARU

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EDUCATION

Master of Engineering in Computer Science, Cornell University GPA:3.65 August 2018 - May 2019
Bachelor of Science in Computer Science, Cornell University GPA:3.73 August 2015 - December 2018
Minor in Electrical and Computer Engineering

PhD level courses: Advanced Machine Learning Systems, Computer Vision, Bayesian Machine Learning, Numerical Methods for Data Science

Other Courses: Advanced Microcontroller Design, System Security, Signal Processing, Database Systems

EXPERIENCE

Software Development Engineer II SDE I: July 2019 - March 2021, SDE II: April 2021 - Present
Amazon, Halo Tone Science Team (Health CV ML) *Seattle, WA*

- Develop machine learning workflow to identify an enrolled speaker in streaming audio and provide emotion analysis, using Swift, Kotlin, Rust, CoreML, and Tensorflow
- Lead integration of machine learning models into the application and evaluated performance in development and production

Software Development Engineer Intern May 2018 - August 2018
Amazon, Customer Service Applications *Seattle, WA*

- Developed a Spring MVC application for self-service configuration of surveys, reducing SDE effort

Graduate Teaching Assistant / Teaching Assistant Aug 2017 - Dec 2017, Aug 2018 - May 2019
Cornell Computing and Information Science *Ithaca, NY*
Computer Vision, Machine Learning, Database Systems

- Held office hours and developed programming assignments for computer vision and machine learning

Software Engineer February 2017 - May 2018
Cornell Autonomous Bicycle Team *Ithaca, NY*

- Lead the computer vision localization project for the autonomous vehicle system to understand its location and surroundings using machine learning and odometry, using Nvidia Jetson TX1, Zed Stereo Camera/SDK, and ROS

Business Lead February 2016 - December 2018
Cornell Genetically Engineered Machines Team (iGEM) *Ithaca, NY*

- Led the business/entrepreneurship subteam to win the 2017 Best Supporting Entrepreneurship iGEM special award over 300 international undergrad teams
- Cloned and tested two bacteriocin genes into bacterial plasmids to create a more effective treatment for bovine mastitis

RESEARCH

Dynamically Adding and Removing Neurons Developed novel iterative pruning algorithm to make neural networks more efficient on the MNIST and CIFAR datasets. [<link>](#)

Domain Adaptation Worked with Professors Bharath Hariharan and Kavita Bala to create a new dataset of different types of fashion images, and use various domain adaptation techniques to improve the performance of the FashionNet model

Extending Graph Convolutional Networks to Edge Attributed Networks Developed new architectures for graph convolutional networks (GCNs) to leverage node and edge based features. [<link>](#)

Accurate Kernel Interpolation with Compactly Supported Kernels Use compactly support kernels to make scalable KISS-GP Gaussian process framework more accurate and efficient. [<link>](#)

Pancreatic Tumor Classification Evaluated different deep learning architectures, including 3D CNNs, on the the classification of pancreatic tumors. [<link>](#)

Seizure Detection Used time series data and wavelet transform coefficients with dimensionality reduction on various machine learning models to achieve over 80% AUC on seizure detection using electroencephalography (EEG) data. [<link>](#)

Human Movement Correction Used a microcontroller, stereo camera, and OpenCV to detect markers with 3D coordinates in order to correct human body motion. [<link>](#)