

Pavan Seshadri

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in pavanseshadri • 🇺🇸 US Citizen

Education

GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

B.S. Computer Science, Minor in Music Technology | Deans List 2018 - Present

Aug. 2017 - May 2021

Concentrations in: Artificial Intelligence and Media

RELEVANT COURSEWORK: Deep Learning, Machine Learning, Robotics and Perception, OOP Design Patterns, Design and Analysis of Algorithms, Computer Architecture, Data Structures, Linear Algebra, Applied Combinatorics

Experience

AMAZON, INC.

Seattle, WA

Software Development Engineer Intern

May. 2020 - Aug. 2020

- o Interned on the Browse Classification team, which develops DNN models to categorize incoming products for Amazon.com
- o Designed and built an automatic threshold feature in the DNN training pipeline to produce accuracy/coverage curves and pick a threshold value, which lowered total applied scientist effort from 45-75 hours to minutes.
- o Leveraged AWS lambda, EMR, S3, and Apache Spark to implement DNN training features.

GEORGIA TECH GVV CENTER

Atlanta, GA

Research Assistant | Music Informatics Lab

Jan. 2020 - Present

- o Researching the use of Neural Networks to automatically grade and give feedback on musical performance auditions.
- o Investigating and building models to grade musical performances for a single instrument.
- o Scaled up current RNN and CNN-based models to incorporate additional datasets using PyTorch.
- o Optimized models to increase performance by 25% in predicting musicality, rhythm and note accuracy scores.

GEORGIA TECH SCHOOL OF BIOMEDICAL ENGINEERING

Atlanta, GA

Research Assistant | Gleason Lab

Aug. 2018 - May 2019

- o Worked on an iOS based tool to determine pregnancy risks from scanned 3D models of patients, currently deployed in Ethiopia.
- o Developed an iOS application to determine pregnancy complication risk based on developed mathematical models.
- o Implemented Gradient Analysis techniques to classify human anatomy on 3D models using MATLAB.

Awards

2020: President's Undergraduate Research Award

2016: Eagle Scout Award

Projects

WORD UP!: React-native

- o Developing a central hub application for communities to read new news, find events, and communicate.
- o Application developed cross-platform in react-native for iOS and Android.

SONG GENERATOR: Python

- o Web app that scrapes lyrics from the web and uses markov models to generate a new song based on a certain artist.

Skills

PROGRAMMING LANGUAGES: Python, Java, C/C++, MATLAB, Javascript, Swift, HTML/CSS, Bash

FRAMEWORKS/TOOLS: AWS Suite, PyTorch, Numpy, scikit-learn, pandas, Android SDK, iOS SDK, Git, Agile

LANGUAGES: English, Spanish

INTERESTS: Audio ML, NLP, Robotics, Music Composition, Audio Engineering/DSP, Creative Writing, Finance