

Aishwarya Mallampati

LinkedIn, Portfolio

Email : aishwarya.mallampati@gmail.com

EDUCATION

- **Pennsylvania State University, University Park** State College, PA
Master of Science in Computer Science and Engineering; Jan. 2020 – May 2021
- **IIITDM Kancheepuram** Chennai, India
Bachelor of Technology in Computer Engineering; GPA: 3.67 (9.19/10.0) Aug. 2014 – July. 2018

EXPERIENCE

- **Trimble Inc.** Chennai, India
Software Engineer Aug 2018 - Dec 2019
 - Developed a module that generated PDF reports on work progress in QML android application.
 - Derived an algorithm that computes the points of intersection of rotated ellipses(CAD entities) in constant time.
 - Developed modules in GO!Zeit android app using MVVM architecture.
- **Lucid Software Limited** Chennai, India
Software Engineering Intern May 2017 - Sep 2017
 - Developed algorithm that optimised CT Reconstruction code up to 67% in terms of memory usage.

PROJECTS

- **Android Development**
 - CriminalIntent: The users of this app can record small crimes in offices by taking the picture of the crime scene, record the date and send a message to suspect using apps such as gmail etc.
 - BeatBox: Built an app using MVVM architecture that plays five soundtracks at the same time.
 - NerdLauncher: Built a custom launcher app to launch apps on an android device.
- **Digital Image Processing II**
 - Homotopic Skeletonization: Performed thinning of images to find their skeleton using hit-or-miss transform.
 - Texture Segmentation: Built gabor filter to segments textures in an image
 - Generated fractals using iterated function systems.
- **Pattern Recognition and Machine Learning**
 - Implemented Linear Discriminant Analysis and Fisher projection on datasets involving classification of wines, individuals performing TaiChi (martial art), and wallpaper patterns.
 - Performed Feature Selection using filter and wrapper methods on EEG, FACE, and individuals performing TaiChi (martial art) datasets.
 - Implemented wallpaper patterns classification model using Convolutional Neural Networks
- **BTech IIITDM**
 - Transfer Function Generation for Direct Volume Rendering: Built a tool that generates transfer functions for direct volume rendering at interactive speed.
 - OOPS: Analyzed performance of different sorting algorithms in C++.Implemented basic graph algorithms using custom queue and stack templates.
 - Computer Networks: Built multiport server and flow control technique simulations using socket programming
 - DBMS: Created back end for restaurant location finder app using MySQL.
 - Operating System: Implemented lazy dentist problem using pthreads and semaphore
 - Embedded Systems: Built a stable version of Linux kernel with minimum kernal image size.

SKILLS

- **Technical Skills:** Python3, Java, Kotlin, C++, C, Matlab, Verilog, MySQL, Linux, Android, Git, Agile
- **Soft Skills:** Strong team player with good communication skills; Focused and punctual