

Pradnya Raghavendra Sangoram

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EDUCATION

Pace University, Seidenberg School of Computer Science and Information Systems

New York, NY

Master of Science (M.S.) in Computer Science | **Concentration:** Artificial Intelligence | **GPA:** 3.49

May 2021

Visvesvaraya Technological University, B.V. Bhoomaraddi College of Engineering & Technology

Karnataka, India

Bachelor of Engineering (B.E.) in Automation & Robotics

June 2017

RELEVANT COURSEWORK

Computer Vision | Machine Learning | Pattern Recognition | Artificial Intelligence | Deep Learning | Algorithms for Data Science | Enterprise intelligence development | Image processing | Natural language processing (NLP) | text summarization and classification | Data visualization | Robotics.

TECHNICAL SKILLS

Programming Languages: C, Java, Python, MATLAB, HTML, CSS

Software and Frameworks: Visual Studio Code, Jira, Excel, Tableau, Google cloud, IBM Watson studio, GitHub, Docker, TensorFlow/Google Colbs

Database: SQL

Version Control: Git

Certification: Certification on Data Science, Inventateq

EXPERIENCE

Accenture Solutions Pvt. Ltd.

Bangalore, India

Application Development Associate

January 2018 – June 2018

- Coded an automation testing program using Selenium for functional testing of the desktop applications.

ACADEMIC PROJECTS

Chords-Virtual Collaboration tool

August 2020 – May 2021

- Developed a web collaboration tool for professionals working remotely to communicate virtually during the pandemic
- Worked on technologies like reactjs, mongoDB, firebase, database to create the web application.
- We adapted for Agile methodology.

Audio visual emotion recognition

August 2020-December 2020

- Built a machine learning method capable of recognizing feelings in the same way as humans do and has a lot of potential applications in Human-Computer Interaction (HCI), human-assistive technologies and online education, among others
- "Ryerson Audio-Visual Database of Emotional Speech and Song (RAVDESS)", a dataset of images containing 24 professional actors was used to train two feature extractors, one CNN model (for video) and second, RNN model (for audio)
- Voting method was used to combining both feature extractor results to obtain an output.

Machine Learning Model for Medical Image Segmentation

March 2020-May 2020

- Collaborated in a team of two to develop a method that can automatically detect the Osteoarthritis affected bone area from a knee MRI image based on image segmentation concept.
- Prepared data for model training by generating binary mask for each segmented image using MATLAB program. Trained a machine learning convolutional neural network model called U-Net to perform bone segmentation on 3D knee MRI using Google-colabs, resulted in automatic detection of the affected bone aera accurately.

Flexible Robot Cell

January 2017 – May 2017

- The design and fabrication of a robot and conveyor belt system to automate the process of sorting metal pieces according to shape using a machine vision algorithm, reducing production time and manpower.
- Programmed ABB Robot for palletization and developed image processing program for part detection and part matching using Python.
- Performed verification and validation, testing, documentation, assembly of conveyor system, delta robot, and whole robot cell, creating a solution that enables robots to sort components in synchronization with the moving conveyer belt.

Robotics Teaching Aid

June 2016 – December 2016

- Demonstration of Design and control of a 3DOF robot as an educational tool to study kinematics of the robot for students.
- The Inverse and Forward kinematics functions were created using JAVA allowing the user to select the desired kinematics.
- In the hardware, the CNC water jet was used for machining.
- Arduino controller was used for programming 3 RC servomotors using JAVA.
- The designing PCB layout in Eagle, hardware selection, simulation and Testing, verification and validation of the robotic Arm, Documentation, programming Arduino were my responsibilities.