Anirudha N Shastri

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EDUCATION

Northeastern University, Boston, MA — August 2022 - Present
Khoury College of Computer Sciences
Masters in Artificial Intelligence

Dayananda Sagar University, Bangalore KA — June 2022
Bachelor's in technology(B-Tech), 8.37 on 10
Concentration: Computer Science and Engineering.

TECHNICAL SKILLS

Technical: Python, C, C++, OpenCV, Java, JavaScript, HTML, MATLAB, SQL, GCP, Amazon Web Services, Neural Networks, ML, Git, TensorFlow, PyTorch, NodeJS, CSS
Languages: English, Hindi, Kannada.

PROJECTS

Final Year Project, Dental Assistance Tool |Python, CSS, Java Script, SQL, OpenCV, Deep Learning — January 2022 - June 2022

- Led and mentored a team of 5 in developing a website for dental data collection and deployment of AI diagnostic tools. The platform would help bridge the gap between dentistry and AI technology at Dayananda Sagar University.
- Conducted 4-5 presentations to spread awareness and understand the power of AI in healthcare to dental professionals.
- Interacted with dental professionals and supervised a team to conduct surveys of requirements from dentists to accomplish the project. The survey resulted in 3 main ideas to be further investigated.
- Utilizing the tools on the website led to optimizing dental diagnostics by saving the time it took to analyze and annotate X-rays from 30-45 minutes to a few seconds, it was also able to collect over 2500 images to train these models.
- This project contributed to the establishment of a Memorandum of Understanding (MOU) between the Computer Science Department and the Dental College.
- WON FIRST PLACE against 97 other projects in the Dayananda Sagar University Project Expo 2022.

Research, Landmark Detection for Bone Age Prediction| Python, OpenCV, TensorFlow — January 2021 - December 2021

- Implemented a Deep Learning program for the localization of 19 key points on a Lateral Cephalogram for bone age prediction by Cervical Vertebral Staging.
- Incorporating the use of tools into daily diagnostics can help with time deficiencies and human error. Developed and executed a landmark localization model using an innovative hourglass architecture, achieving a remarkable accuracy of 87% in localization of 19 points.
- Designed custom Annotation tool for Dental Research |Python, OpenCV: For the above research, developed a custom tool for the collection of 400 annotated X-rays to train custom Deep Learning Models.

PROFESSIONAL EXPERIENCE

nference, Bangalore, KA — February 2022 - April 2022
Computer Vision Intern

- Designed an OCR (Optical Character Recognition) Pipeline leveraging Pytesseract and CRAFT for digitizing thousands of handwritten labels on older pathology slides.
- Developed an algorithm for the detection of KI-67 markers for Breast Cancer Detection using Computer Vision, for the reduction of time taken for manually counting the number of nuclei in a slide.

Unravel Bioscience, Boston, MA — June 2023 – December-2023
Computational Drug discovery Intern

- Elevated the proprietary tadpole tracking system to enable precise individual tadpole tracking, surpassing previous group tracking limitations.
- Expanded the spectrum of validated metrics from 3 to 7, empowering the laboratory to conduct comprehensive assessments of tadpole behavioral patterns.
- Revamped the codebase by segregating computer vision and post-processing components, resulting in a highly scalable tracker capable of accommodating an increased volume of experiments.
- Engineered a custom diagnostic tool, characterized by ECG-like functionality, purpose-built to monitor metrics associated with tadpole movement.

ADDITIONAL INFORMATION

- Enjoy playing the guitar, have been part of school and university bands.
- Competed in a Healthcare Hackathon and was chosen for pre-incubation training for an AI-powered Heart Monitoring device for the detection of arrhythmia.