RUTWIK PALASKAR

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http://www.linkedin.com/in/RutwikPalaskar

SUMMARY

Interested in interdisciplinary research combining Maching Learning, Healthcare and Bioengineering.

EDUCATION

MIT ADT University, Pune, IN 2018 - Current
B.Tech. Bioengineering 8.13/10

PUBLICATIONS

2. **Rutwik Palaskar**, Renu Vyas, Vilas Khedekar, Sangeeta Palaskar and Pranjal Sahu, "Transfer Learning for for Oral Cancer Detection using Microscopic Images", Under Review

1. Shreyas Patil, Mihir Kulkarni, Shubham Hajare, Tanvi Parkhe, **Rutwik Palaskar**, Diksha Zutshi, Reema Shyamsunder Shukla, Sameer Desai, "Assistive Device for Hemiplegic Patients", *3D Printing*, Book Chapter

PROJECTS

Transfer Learning for for Oral Cancer Detection using Microscopic Images
Research Assistant, MIT ADT University Oct 2020
- Worked with doctors at a hospital in Pune to collect one of the first datasets of microscopic images for oral cancer detection
- Applied current state-of-the-art models of transfer learning for image classification

Predicting Urinary Incontinence in Elderly
Medhacks Hackathon, Johns Hopkins School of Medicine Oct 2020
- https://devpost.com/software/sneakpeakintoleak
- Built an assistive technology for the elderly to predict urinary incontinence

Collection and Utilization of Single-Use Plastics and Various Other Industrial Wastes
Smart India Hackathon Oct 2019 - Jul 2020
- Built a sustainable solid waste management system
- Developed an online B2B e-commerce service for buying and selling of single-use plastics and various types of industrial wastes
- Developed machine learning algorithms for real-time waste classification to segregate waste.
- Represented my university in this national-level hackathon

Advanced Arduino
Venture Centre, Pune Oct 2019
- Worked with multiple sensors and output devices

INTERNSHIPS

Stony Brook University *Part-Time Intern* Oct 2020 - Current
- Cardiac Image Segmentation for generalisation over multi-site data
- Extending state-of-the-art models for Oral Cancer Detection to Cardiac Image Segmentation

Prosthocentric *Part-Time Intern* Nov 2019 - May 2020
- Currently developing hardware designs and blueprints for the start-up's patented dental products

https://prosthocentric.com
- Prosthocentric develops and builds automated temporomandibular jaw-relation records to aid and assist dentists in designing dentures.
- Prosthocentric research has been awarded USA and EU patents, and Rs. 50,00,000 grant from the Government of India to develop these devices.

Tech Smart Systems *Data Science Intern* Mar 2019 - Apr 2019
- Trained machine learning models for classification and regression tasks on in-house housing prices dataset.
- Applied data pre-processing and machine learning techniques on real-life housing prices data.
- Learned about Pandas, NumPy, Matplotlib, and Sci-Kit learn libraries in Python.

SKILLS

Platforms TensorFlow, PyTorch, Keras, Arduino, Django, Flask, Web Development
Programming Languages Python, Java, C, C++, HTML, CSS

RELEVANT COURSES

MIT ADT C, Java, Advanced Java, Machine Learning, Python, Data Mining and Warehousing, Microcontrollers and Bioelectronics, Electrical engineering, Electronics, Genomics, Microbiology, Biostatistics, Genetics, Molecular Biology, Biochemistry, Biochemical Engineering

MOOCs Machine Learning (Andrew Ng, Coursera, Stanford University), Machine Learning A-Z: Hands-on Python and R in Data Science (Udemy), C programming for beginners - Master the C Language (Udemy), Deep Learning A-Z (Udemy), TensorFlow 2.0 (Udemy), Python Programming Master Class (Udemy), Full Stack Django Web Dev (Udemy)

HONORS

Smart India Hackathon, Finalist 2020

Class Representative 2019-2020
A mediator between students and teachers and communicating student welfare issues to the department administration.

OUTREACH

Fundraising Team Lead Odser NGO, Pune

Sambandh Project Co-ordinator Prem Niwas Old Age Home, Pune

SPORTS

Represented my school at the State level in football and basketball and also our Bioengineering department at Inter-College competitions in football, basketball, and table tennis.