

RUTWIK PALASKAR

✉ rutwikpalaskar@gmail.com

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

🔗 <https://github.com/RutwikP>

SUMMARY

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

EDUCATION

MIT ADT University, Pune, IN
B.Tech. Bioengineering

2018 - Current
8.13/10

PUBLICATIONS

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

Android Application Development Workshop for Startup Enthusiasts

iBase Electrosoft LLP, Virtual

March 2021

- An App that ensures social distancing during the Covid 19 pandemic where recording a person's temperature and O2 saturation can be noted by just scanning a QR code. Reducing contact at the University level would help in decreasing the chances of the virus spread as temperature and O2 saturation is measured manually followed by writing down entries.

- [Shwaas](#)

Transfer Learning 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

- [Technical Report](#)

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, Bio-statistics, 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.