

Shaily Bajpai

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- https://github.com/devshaily

PROFILE

Dynamic and innovative professional with a Bachelors in Computer Science & Engineering and a Masters in Information & Communication Engineering, currently focusing on Deep Learning. Proficient in Python and PyTorch, with hands-on experience in medical image processing and computer vision. Seeking a career opportunity in Deep Learning, Artificial Intelligence, Machine Learning, Data Science or other technical roles matching my educational background to contribute to impactful projects and drive technological advancements.

PROFESSIONAL EXPERIENCE

 Research Student, Chosun University, South Korea Developed deep learning models for medical image processing, focusing on improving diagnostic capabilities. Implemented and optimized algorithms for image segmentation and classification using PyTorch and Tensorflow. 	Feb 2023 – Present
 Freelance Subject Matter Expert (CS), Chegg India, Remote Provided expert guidance on questions or topics, specializing in Computer Science & Engineering. 	Aug 2023 – Present
 Research Student, SunMoon University, South Korea Conducted research on Ethernet/IP Adapter for cooperative robot communication, leading to a published paper at the ICCAS 2022. 	Feb 2022 – Feb 2023
 Mentor-Teacher, WhitehatJr Education Technology, Remote Empowered young minds in coding and mathematics, mentored fellow instructors, and facilitated hands-on learning. 	Apr 2020 – Jan 2022
 Learning & Development Specialist, Think & Learn (BYJU'S), India Conducted one-on-one sessions to resolve mathematical doubts, enhancing students' understanding and performance. 	Jun 2019 – Dec 2019
EDUCATION	
Masters (Information & Communication Engineering), Chosun University, South Korea Major: Deep Learning / Artificial Intelligence GPA: 4.31/4.5	Feb 2023 – Feb 2025
Bachelors of Technology (Honours), Lovely Professional University, India <i>Major:</i> Computer Science & Engineering <i>GPA:</i> 7.23/10 (First Division)	Aug 2014 – Jun 2018

SKILLS

Deep Learning, Computer Vision, Medical Image Analysis

Masters of Psychology, Indira Gandhi National Open University, India

- Programming Languages: Python, HTML, CSS, JS, C++
- Frameworks: OpenCV, PyTorch, TensorFlow, Bootstrap
- Platforms & Databases: Thunkable, Firebase, Dialogflow
- Software/Editors: Codepen, Colab, Brackets, Android Studio
- Tools & Version Control: Jupyter Lab, GitHub, Anaconda
- Others: MS Office, R Studio

Major: Counselling Psychology

Rank: First Division

Jul 2018 - Jun 2021

PROJECTS

Unified Framework for Teeth Instance Segmentation & Missing Teeth Count, **Detection and Localization in Panoramic Radiographs**, *Masters Thesis*

Current

Developed a unified architecture that segments 32 distinct teeth instances and detects missing teeth along with counting and localizing them simultaneously with present teeth.

UNet Based Multi class Teeth Segmentation in Panoramic Images

2023

Perfromed Multiclass Teeth Segmentation on panoramic radiographs to segment teeth instances in 32 distinct classes, by making required architectural changes.

EIP module for Cooperative Mobile Communication

2022

Worked upon how to develop Ethernet/ IP based module to perform explicit messaging communication with cooperative Robot.

Developed a few webpages and published on Github

2020 - 2021

Onclick Object Identification ∂

Canvas ∂

Blog ∂

Portfolio ∂

Embedding External App $\mathscr D$

Voice Selfie web app ∂

Realtime Object Identification ∂

A study on the relationship between family environment and personality traits among emerging adults, *Masters Project*

2019

The study focused on the relationship between family environment and personality traits of emerging adults.

e-commerce app using Android Studio, Bachelors Capstone

2018

Developed an android app for an Ayurvedic company, facilitating online ordering and home delivery.

2017

Data Analysis on Human Trafficking in India using RStudio, *Academic Project* Analyzed year-wise trafficking data, geographic trends, and created graphical representations to identify hotspots and trends.

2017

PUBLICATIONS

UNET-based Multiclass Teeth Segmentation in Panoramic Dental Radiographs,

2024 Korea Communications Society Summer Conference (KICS) ∂

Advances in Tooth Detection and Segmentation in Dental Panoramic X-ray Images: A Review, 2023 Korea Communications Society Summer Conference (KICS) *⊗*

Development of Ethernet/IP Adapter for Explicit Messaging in Cooperative Robot Communication, 2022 22nd International Conference on Control, Automation and Systems (ICCAS)/ IEEE *⊗*

POSTER PRESENTATION

Missing Teeth Count and Localization Methods in Dental Radiographs: A Review,

36th Workshop on Image Processing and Understanding (IPIU 2024) ₽

AWARDS

Consecutive research scholarship for 4 semesters, Chosun University

Recognitions:

- Hackathon participation, Coding Skills Recognition & Kids' Hackathon Jury certificate by WhiteHat Jr
- Data Science Classroom Scholarship by Springboard
- Google India Challenge Scholarship (Android Development) by Udacity
- AMCAT Certified Data Processing Specialist

LANGUAGES

English — Fluent

Hindi — Native/Bilingual

(IELTS: 7 bands overall, 7.5 speaking)