# Shreyas Vedpathak

▶ https://shreyasvedpathak.github.io 🖹 https://stackoverflow.com/users/15226638/shreyas-vedpathak

#### **PROFILE**

A software engineering graduate with 1.5+ years of experience in software development in computer vision, backend development, cloud, and research & development. I seek to utilise my broad educational background and excellent analytical, technical, and programming skills to thrive as an entry-level software engineer.

#### **EDUCATION**

Jul 2018 – Jun 2022

MIT World Peace University ☑

India

Bachelor of Technology
Major: Computer Science

CGPA: 9.52

Jul 2016 – May 2018 India Sir Parashurambhau College

**HSC** 

Branch: Science Percentage: 81%

## **SKILLS**

Python • C++ • Docker • SQL • HTML • CSS • MongoDB • Scikit Learn • OpenCV • PyTorch AWS (Amazon Web Services) • Tensorflow • JavaScript • Flask • Perl • Bash • Shell

# PROFESSIONAL EXPERIENCE

Nov 2021 – present India **Role: Software Development Engineer Intern** 

Company: Upjao Agrotech 🗷

- Created a Python package that would generate a numerical report and improved server response time by 45 percent.
- Contributed to the research team by brainstorming and authoring 2 patents.
- Restructured the server architect to make it scalable, flexible, and accelerated development with Docker and Kubernetes.

Aug 2021 – present USA **Role: Mentor** 

Company: DeepLearning.AI □

- Mentored candidates enrolled in specific Coursera courses by solving their doubts, sharing learning material, and career advice.
- Test new lab exercises before they are released to enrolled students.

Mar 2021 – Jun 2021 India **Role: Data Analyst Intern** 

Company: Analytics Domain 🛮

- Created a web application-based analysis tool that would leverage data from public APIs and web scraping.
- Curated 2 courses for Machine Learning and Deep Learning topics at the beginner and intermediate levels.
- With the produced courses and a variety of user-side UI features, developed a web app-based Learning Management System.

## **PUBLICATIONS**

Jun 2021

Genomics, High Performance Computing and Machine Learning

UIJRT (United International Journal for Research & Technology)

Nov 2020

# **PCOcare PCOS Detection and Prediction using Machine Learning**

Algorithms 2

Bioscience Biotechnology Research Communications

#### **PATENTS**

Jan 2022 India A method and system for Encoding and Decoding data on objects by using geometrical shaped markers.

Patent Pending

A strong alternative to QR codes, barcodes, and RFIDs for simultaneously tagging, tracking, and recognizing multiple objects using computer vision techniques.

#### **AWARDS**

Nov 2020

Best Paper Award 🛮

*International Conference on Intelligent Systems, Data Science and Computing*Best Research Paper Award in Machine Learning Track.

# **PROJECTS**

Nov 2021 - present

AutiScan 🗷

Final Year Project

- The candidate's reaction to a reference video is recorded, and their facial landmarks are utilized to classify them using a CNN + RNN deep learning model.
- Increased accuracy from 60% to 90% using finetuning.

May 2021 – Sep 2021

# Segmentation of Fire and Smoke in Nano-Satellite Imagery using Mask R-CNN and Res-UNet

Research Project

- Separated natural objects such as clouds, snow, and rivers against smoke caused by a forest fire using Image Segmentation.
- Achieved 0.925 and 0.45 IoU scores using Instance Segmentation and Semantic Segmentation respectively.

Jun 2021 – Jul 2021

#### Loan Management System - Flask API

*Private Project* 

- Simple loan management REST API made with Flask and SQLite.
- Token-based authentication.
- Flask Blueprints for future scaling.

Oct 2020 - Nov 2020

#### **PCOcare: PCOS Detection & Prediction using ML** ☑

Research Project

- Utilised Exploratory Data Analysis to build a hypothesis.
- Feature Engineering, Model building, and Ensembling of models were used to test the hypothesis.

#### **CERTIFICATES**

- TensorFlow: Advanced Techniques ☑
- Docker and Kubernetes: The Complete Guide
- Modern Application Development with Python on AWS