# 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**

#### MIT World Peace University

Jul 2018 – Jun 2022 | India Bachelor of Technology Major: Computer Science

CGPA: 9.52

## 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

# **Role: Software Development Engineer Intern**

Nov 2021 – present | India

Company: Upiao 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.

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

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.

#### **Role: Data Analyst Intern**

Mar 2021 – Jun 2021 | India

Jul 2016 – May 2018 | India

Company: Analytics Domain 🛮

- · Created a web application-based analysis tool that would leverage data from public APIs and web
- 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**

# **Genomics, High Performance Computing and Machine**

Jun 2021

Learning **2** 

*UIJRT (United International Journal for Research & Technology)* 

**Learning Algorithms** □

Bioscience Biotechnology Research Communications

#### **PATENTS**

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

Jan 2022 | India

Patent Pending

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

#### **AWARDS**

# 1st Runner Up - NTT DATA AI Hackathon 🗷

29 Jul 2022

NTT DATA

Ideate and build a working AI product to solve a healthcare-related problem. Won prize worth 1.25 Lakh.

#### Best Paper Award

Nov 2020

International Conference on Intelligent Systems, Data Science and Computing

Best Research Paper Award in Machine Learning Track.

#### **PROJECTS**

AutiScan 🗗

Nov 2021 – present

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.

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

May 2021 - Sep 2021

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.

# Loan Management System - Flask API

Jun 2021 – Jul 2021

Private Project

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

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

Oct 2020 - Nov 2020

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