**ABHISHEK PRAKASH**

ap20fe@my.fsu.edu | Tallahassee,FL | 850-300-1887

www.github.com/abhishekprakash256 | www.linkedin.com/in/abhishek256

**SUMMARY**

A fresh computer science graduate student with strong programming skills looking for a software development role with a passion for solving real world problems using computational algorithms. Experienced in working with machine learning algorithms , deep learning framework, designing cloud infrastructure and automation by progressive career.

**EDUCATION**

**M.S in Computer Science**, Florida State University - **GPA:3.3/4.0** **[Apr 2023]**

* Courses: DeepRL Learning*,* Data *Computer Communication,* Artificial Intelligence*,* Advanced Algorithms*,* Network *System Admin, Internet of things, Database systems.*

**B.E in Computer Science**, Bhilai Institute of Technology - **GPA: 7.6/10**  **[Jun 2019]**

**EXPERIENCE**

**Florida State University,** Voluntary RA **[Tallahassee, USA]**  **[Feb 2023]**

* Developing a website for displaying all the world's holidays using **PHP, Java Script, HTML and CSS.**
* Applied the CRUD operation on a **SQL** database using the **PHP** for the backend.

**Cognitive Geo Interpretation Inc,** Intern **[Tallahassee, USA]**  **[Jan 2022 – Dec 2022]**

* Developed, designed and maintained git-lab **CI-CD pipeline** for developing **infrastructure** of **live production** standalone machines on **AWS**, using **Ansible** for the provision process, wrote scripts on **Python** to help the provision process.
* Increase test coverage from 60% to 75% for **Python** modules using the **Pytest and Python Unittest** for performing end to end **testing**.
* Secured standalone machines using the **IPtables** for the building the **Firewall** rules for blocking IP access and selective access to machines.
* Generated and **automated** python module documentation using **Sphinx Documentation.**

**Florida State University,** Research Assistant **[Tallahassee, USA] [Apr 2021** - **Dec 2021]**

* Achieved a prediction accuracy of around 90% by Implementing **Fed-Avg algorithm** for **Federated learning** on **MNIST data set** with six learning workers using **Pytorch**.
* Achieved 30% faster task off-loading by developing **Double deep - Q learning model** in **Pytorch** for **Reinforcement Learning** task, on edge devices.
* Increase time efficiency by 60 % by developing automation scripts to collect and process data from Zigbee and Wi-Fi devices.

**PROJECTS**

**Open-Source Patching and Un-patching tool,**[shorturl.at/fqsLY] **[Aug 2021 - Oct 2021]**

* Developed an **Open-Source** **tool** named **“patching**” to cut the segments (patches) of an image.
* Enlarged patches using an **interpolation algorithm.**
* Developed an **“unpatching**” tool that takes the enlarged patches and combines them to generate the final image using **Python, NumPy, Pytorch and Poetry.**
* Code optimization with **Pytest, Black Formatter, Pylint and Coverage.**

**Pytorch Image Style Transfer**, [ shorturl.at/ajBHR]  **[Jul 2021 - Sep 2021]**

* Implemented the methodology from **Image Style Transfer** using **Convolutional Neural Networks** (CNN) paper on style transfer in **Pytorch**.
* Utilised the model VGG19, extract the content and style from layers to create a new target image.

**Plant Leaf Disease Recognition system**, [shorturl.at/mwR03] **[Aug 2018 - Oct 2018]**

* Developed a system to detect plant leaf diseases using **image processing** in **TensorFlow.**
* Trained it on the selected number of plant diseases images.
* Achieved ~95% accuracy by using **transfer learning** on **Google Inception Model**, made data sets through fieldwork & online research.

**Academic Website**, [shorturl.at/huMV0] **[Sep 2021- Oct 2021]**

* Developed and deployed a static website using **HTML, CSS, JS, and Media Query** to showcase the academic works and accomplishments for my academic advisor.

**PUBLICATIONS, PRESENTATION AND CONFERENCES**

* Facial Recognition with OpenCV, Amit Thakur, Abhishek Prakash, ICCVBIC 2019, Coimbatore, Sep 2019, **ISSN:2194-5357.**
* Plant leaf disease recognition using TensorFlow**,** Amit Thakur, Abhishek Prakash**,** ISMAC-CVB 2109, Mar 2019, ID: **21100380994.**

**TECHNICAL SKILLS**

* Programming Languages and Scripting: Python, C++, C, Shell Scripting
* AI Technology: Federated Learning, Deep Learning, Machine Learning, Reinforcement Learning
* Tools: Git, Pytorch, NumPy, Pysyft, Matplotlib, Pytest, Pylint, Poetry, Coverage, DevOps: GCP, AWS, Terraform, Gitlab CI-CD, Packer. Web Development: HTML, CSS, JavaScript