Aman **Agarwal**

Web Developer · Python Developer · Data Science Enthusiast

☎ (+91) 8218517734 | ✉ agarwalaman860@gmail.com | ⌨ agarwalaman786 | ⬛ aman-agarwal-b61626168

Education

University Institute of Engineering and Technology, Panjab University B.E in Computer Science and Engineering	CGPA : 8.85/10	2017 - Present	*Chandigarh, India*
ST. Paul's Inter College Secondary	Grade : 93.2%	May 2016	*Agra, India*
Senior Secondary	Grade : 86.7%	May 2014	*Agra, India*

Skills

Programming	C++, Python, SQL, Data Structure and Algorithms **(codechef-agarwalaman860, leetcode-agarwalaman860)**
Libraries and Frameworks	tkinter, Numpy, Pandas, Matplotlib
Web and Databases	HTML, CSS, JavaScript, PHP, MYSQL, SQLite3 with Python
DevOps	Docker

Work Experience

Oil and Natural Gas Corporation   *Dehradun, India*
Software Developer Intern   *June 2019 - August 2019*
- Developed a **Desktop application** which generates the **AMC bills** for the organization.
- User enters contract number and rest info is fetched from the **database** designed in SQLite3.
- Automated the complete system using python **Frontend (tkinter), document creation (docx), database (SQLite3)**.
- This software increased the **working efficiency** of oganization by **20x**

Design and Innovation Centre   *Chandigarh, India*
Research Intern on Medical Devices   *Nov 2018 - Aug. 2019*
- Worked on the dental device **Tooth Shade Detector** used in **digital imaging** technologies to analyze the shade of patient's tooth
- Used **Nearest Neighbour Algorithm** to extract the dominant **RGB** value in the picture.
- **Classified** the shade of the input image **(from 16 shades)** by using the **RGB** value **(extracted by applying algorithm).**

GeeksforGeeks   *Chandigarh, India*
Technical Content Writer (Profile link)   *March 2019 - Jan 2020*
- Written the articles on technical topics **(PHP, JQuery, HTML, JavaScript,Software Engineering,C#.)**

Projects

Satellite Image Reconstruction
Image Segmentation | OpenCv | Python |Flask | Deep learning | Docker | kubernetes | IBM Cloud | 3 member team   *April 2020 - Aug 2020*
- **Technoutsav 3.0** Hackathon organized by **Deloitte**.
- Developing solution to **reconstruct the satellite Images** using **UNet architecture** for **cloud and shadow detection.**
- **Constructed the dataset** over 56 Images by masking the clouds using **photoshop** and to train the **model.**
- **Cloud and shadow removal** is done by designing the **Image Inpainting algorithm** based on the **pixel priority** and **eculidean distance**.
- **Testing** is done over 13 Images got **80% accuracy**.
- Used **Flask** to deploy prototype on **IBM Cloud using kubernetes and Docker**

Advanced Book Transactions System
HTML | CSS | BootStrap | JavaScript| MySQL| PHP | 5 member team   *Jan 2020 - Feb 2020*
- Developed this web application in **Smart India Hackathon 2020** organized by AICTE.
- A fully fledged website having user authentication, API calls, MYSQL Database.
- Integrated **speech to text convertor JavaScript API** to implement voice based searching of books.
- Entry for the new book can be done using **ISBN number** and rest Information will be automatically fetched from the admin side.
- One can **rate the book**, automatic fine calculation, **payment gateway**, **sharing books**, message system when book is issued and returned.

Interactive Web Interface
HTML | CSS | BootStrap | JavaScript| Particle.js | MySQL| PHP | 3 member team   *May 2019 - June 2019*
- Developed this webinterface in **UHackathon1.0** organized by UPES.
- A fully fledged web Interface (theme : healthcare) having API calls, MYSQL Database.
- Integrated video, slider, **discussion form**, dropdown, **recent news option** fetches the news through **JSON API call**.

Courses

FEB 2020	**Python for Data Analysis**, from **Internity Foundation**.	*link*
MAY 2020	**Model Deployment using Flask**, from **Coursera**.	*link*

Achievements

May 2020	**Appointed for the role of problem solver in Data Science**, in **Internity Foundation**.	*link*
Mar 2020	**Institute Rank 1**, Discovery Challenge held by **Scalar Academy**.	*link*
Oct 2019	**Rank 8 among 300 partcipants**, Coding Competiton organized by **CODE OF GEEKS**.	*link*
Aug 2019	**Appreciation letter**, Oil and Natural Gas Corporation,Dehradun, India.	*link*
Jan 2019	**Best Intern**, Internity Foundation	*link*