



UMAR HAYYAT

SENIOR SOFTWARE ENGINEER

PROFILE SUMMARY

An enthusiastic and competent individual with a progressive attitude. Carry a 'can-do' attitude, which is evident through self-motivation and the ability to inspire team members at all levels. Working as a Python developer focused on Django REST, ML, Computer Vision, IoT, and enabling me to use my skills in a high-level professional environment.

EDUCATIONAL HISTORY

National Textile University, Faisalabad

BS Software Engineering | Oct 2015 - Aug 2019

WORK EXPERIENCE

Senior Software Engineer

Tower Technologies (Pvt) Ltd. | Oct 2019 - Present

- Python | Django | DRF | Docker | Rabbit MQTT | Redis | Celery | Serverless Functions | CI/CD | IoT | Raspberry Pi | Linux Server | PostgreSQL

PROFESSIONAL PROJECTS

1. ZERO CARBON | 2022 - Present

- An initiative of the Punjab Group, Zero Carbon is Pakistan's first renewable energy company dedicated to combat climate change through the provision of clean, reliable and resilient energy solutions and to accelerate the transition of the country into a low carbon economy.

Tech Stack:

- 3rd Party API's integration (Huawei, Solis etc.)
- Django based backend with RESTful APIs.
- Frontend in Angular
- PostgreSQL

2. PeopleOps | 2021

- People OPS is an HRMS application designed for Punjab Group, is a comprehensive software that integrates core and strategic HR functions into one solution. It typically features an employee self-service portal and a centralized database. It also automates administrative processes, streamlines recruiting and reduces turnover.

Tech Stack:

- Django based backend with RESTful APIs.
- Frontend in Angular
- PostgreSQL

REACH ME AT

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TOOLS & TECHNOLOGIES

- PyCharm
- Jupyter Notebook
- PostgreSQL
- Postman
- Azure App Service
- Azure IoT Hub
- Azure Git
- Bit Bucket
- Docker
- CI/CD
- Linux Server
- Windows Server
- Redis
- Celery
- Rabbit MQTT
- Python
- Django-REST
- SQL
- Arduino Automation
- Raspberry Pi Automation

INTERESTS

- Big Data Analytics
- Blockchain
- Internet of Things
- Cybersecurity

3. GLAUKUS - IoT | 2021

- In nature, flowing water and waves at the water's surface aerate the water. This provides dissolved oxygen to animals that live in water. Hot water holds less dissolved oxygen than cool water. If the water level in a pond gets too low and summer heat warms the water too much, fish and other aquatic life do not get the oxygen they need and die. Similarly, the quantity of nitrates and ammonia also influences aquatic life.
- Thus, Glaukus is intended to mitigate the effect of these essential elements on aquatic life, by timely alerting the end-user with preemptive measures that should be taken in order to avoid the dire consequences on aquatic life.

1. IoT Hardware Equipment:

- Glaukus system holds IoT-based hardware in form of a static floaty box.
- Equipped with premium quality DO (Dissolved Oxygen), Nitrate, pH, Ammonia sensors along with other weather station sensors to forecast the impacts of sensory values on aquatic life.
- Once calibrated, sensors streamline the data towards its receiver station, which dumps the data directly into a centralized database.
- Real-time data from ponds is visualized across the hybrid digital applications in order to alert the end-user regarding the recent aquatic life environment.

2. Smart Application:

- Glaukus system contains a digital platform that works perfectly on web and mobile apps.
- Glaukus digital application delivers the real-time notification of recent sensory values of activities underwater to the end-user.
- In addition to, adding and connecting the pond with the smart application, the end-user can make the record of all activities i.e., record keeping of Biomass, FCR (Feed Conversion Ratio), and Feed quantity.
- Furthermore, digital apps are designed to remotely control the pond aerators.
- Besides this, the end-user can control the aerators working by switching the manual or automatic mode.

Tech Stack:

- Django-based backend with RESTful APIs.
- Frontend in Vue. JS
- PostgreSQL
- Raspberrypi, Arduino UNO, DO, Nitrate, Ammonia sensors

4. HIT ME UP | 2021

- It's how you share your contact info and social media details with just about anyone near you. When you tap your HMU sticker or business card to someone else's phone, it pops open a link with the particular info you want to share. Whether you're at a networking event or a party, you don't need to carry business cards or spell out your Instagram handle, you just gotta tap!

Tech Stack:

- Django based backend with RESTful APIs.
- Frontend in Angular
- PostgreSQL

5. Ride With Pride - IoT | 2019 - 2020

- As an effort to empower women, UCP is providing a reliable and affordable travel option for females by introducing Scooties!
- These scooties are accessible through a mobile app which can facilitate in many ways. Each scootie can be accessed by logging into the app using UCP student portal credentials. Once logged in you will need to upload a signed wavier, a parent permission form, and a copy of driving license. Soon after the documents are uploaded you will be called in for verification. Once verified manually, you will be able to issue the scootie by scanning the QR code assigned to a particular scootie.
- The journey can be tracked through the app and you will have the option of sharing the trip details with friends and family to ensure safety. Additionally, the help center can be accessed during and after the journey to report a technical issue. The app also has an option to ask for assistance in case of harassment, any illegal activity or an accident.

Tech Stack:

- Django based backend with RESTful APIs.
- Frontend in Angular
- Fully automated Scooties stand.
- RaspberryPi, Arduino UNO, RFID, IR, Ultrasonic and many other sensors are used.
- Image Processing and Character Segmentation to recognize license plates number from live stream Pi-Cam Video.

REFERENCES:

Reference will be furnished on demand.