Ali Waqas

Waterloo, ON, Canada github.com/aliwaqas333

EXPERIENCE

PMR Unit

AI / ML Researcher

May 2021 - Present

Mobile: +1-204-898-8541

University of Manitoba

 $Winnipeg,\ Canada$

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- Deep learning & Photogrammetry: Detection and localization of damage in building structures.
- Computer Vision: Object detection API's for robotics control.
- Web application for robotics applications: Developing AWS-based web apps for monitoring and visualization
 of UAV missions.

Full Stack Web-Developer

Feb. 2018 - Feb. 2020

Peshawar, Pakistan

- Open data Portal: Designed and Developed user-friendly Open data Portal opendata.kp.gov.pk, to allow access of the public to government data via web interface and APIs.
- MERN Stack: Developed NodeJs, React, express, and MongoDB-based web applications with extensive CRUD operations
- o Deployment: Managed PostgreSQL database, NGINX, Redis, and Apache server of deployed project.
- AGILE project development: Execution of projects using AGILE methodology.
- Cloud deployment: Using AWS EC2, IAM, S3, Lambda, CDK for deployment purposes.
- Git and Dockers: Used git and dockers for efficient project development.

Front-end Development Intern

Summer 2019 (6 months)

Code for Pakistan

Peshawar, Pakistan

- UI/UX Workshops: Participated in workshops focused on enhancing user experience, emphasizing user-centric design and color schemes.
- Web Development: Contributed to building responsive web applications using React-JS and Material-UI frameworks.

Technical Support Engineer

June 2016 - June 2017

Clary Icon Pvt. Ltd.

Islamabad. Pakistan

- Data Analysis and Visualization: Engaged in data extraction, visualization, and in-depth analysis to support decision-making processes.
- Website Debugging: Identified, diagnosed, and rectified website issues, ensuring seamless user experiences.

EDUCATION

_	PhD candidate in Mechanical & Mechatronics Engineering,	$May\ 2023 - May\ 2027$
•	University of Waterloo,	$Waterloo,\ Canada$
•	Master in Civil Engineering,	May 2021 - May 2023
	University of Manitoba,	$Manitoba,\ Canada$
•	Bachelor in Electronics Engineering,	${\rm Aug}~2012-{\rm June}~2016$
	$GIK\ Institute,$	$Swabi,\ Pakistan$

AWARDS AND CERTIFICATIONS

- Amazon Web Services: Solutions Architect Professional, KPITB Certified. Issued Jun 2020.
- Deep Learning with Pytorch: Zero to GAN's: Jovian. Issued Jul 2020. Skills: Machine Learning
- Neural Networks and Deep Learning: Coursera. Issued Apr 2020.

SKILLS

- Languages: C++, Python, JavaScript (including TypeScript), PHP.
- Frontend: React.Js with Next.Js, API Integration, Redux, Material UI.
- Backend: ExpressJS, API Development, MongoDB, PostgreSQL.
- DevOps & CI/CD: GIT, GitHub Actions, Docker, AWS, Heroku.
- Deep Learning & Computer Vision: PyTorch, CNN, Metrics, Unreal Engine, 3D Reconstruction, Photogrammetry.