

# Mohammad Amaan Abbasi

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## SUMMARY

Experienced Python Developer with expertise in AWS/Azure cloud. Skilled in developing, programming, and coding IT solutions to enhance Customer Experience applications. Proficient in documentation, unit testing, peer code reviews, automation and maintenance of applications. Extensive experience with technical grooming, Docker, Kubernetes, Jenkins, Visual Studio Code, Git and continuous deployment. Excellent communication and collaboration skills with experience in working with cross functional teams

## PROFESSIONAL EXPERIENCE

VARAHA, Backend Developer

Jun 2022 - Jun 2023

- Collaborated directly with the CTO to create architecture, develop pipelines, and plan user stories, which enhanced my project planning skills and risk assessment capabilities..
- Developed dynamic web applications using Django, resulting in a 20% improvement in user experience and accessibility metrics.
- Utilized QGIS and Geo Django to create geospatial features, enhancing location-based applications and contributing to a 25% boost in geographic functionality.
- Streamlined processes by automating tasks, leading to a notable 90% reduction in Time-to-Live (TTL).

JOHN DEERE INDIA, Python Developer

Nov 2021 - Jun 2022

- Assisted the project manager with user story creation and planning, facilitating structured and efficient project workflows.
- Communicated regularly with the .NET and DevOps teams to ensure smooth completion of tasks and seamless integration across different system components.
- Spearheaded the migration of .NET code to Python, resulting in a 25% improvement in code maintainability and a 20% boost in overall system performance.
- Reverse-engineered old .NET APIs and recreated Python equivalents using Flask blueprints, contributing to a 70% increase in code maintainability.
- Migrated the encryption module from .NET to Python, enhancing the security framework and integration within the system.
- Deployed Lambda functions and Elastic Container Service on AWS cloud, optimizing scalability and achieving a 35% reduction in response time for critical functions.

INCUPAD, Full Stack Developer

Sep 2020 - Sep 2021

- Managed the setup and deployment of EC2 instances, ensuring efficient application hosting and achieving a 25% reduction in deployment time.
- Oversaw user permissions and database management using RDS, optimizing data security.
- Implemented Django-based web applications and REST APIs, utilizing Django Rest Framework.
- Leveraged S3, Workspaces, and Security Groups, enhancing the development environment with an 80% improvement in data storage efficiency and a 90% increase in overall development security.
- Integrated Google's Places API and Firebase Cloud Messaging services using Django FCM.

## SKILLS

Python (5 years), AWS EC2/ ECS/ S3/DMS/ SCT (4 years), CI/CD pipelines - Jenkins, C/C++, Linux, OpenCV, Keras, Git, Gitlab, Apache2, Django REST, ReactJS, Node, Unit Testing, .NET

- Skilled in Django, Python, and Flask for monolithic, distributed & microservices architecture..
- Solid understanding of Unit testing based on Arrange Act Assert pattern.
- Proficient in utilizing AWS services for cloud-based applications and infrastructure.
- Knowledgeable in implementing CI/CD pipelines for automated testing and deployment.
- Experienced in developing projects using Raspberry Pi for embedded systems and IoT solutions.

- Familiar with Cuda, OpenCV, and Keras for database management and machine learning tasks.

## EDUCATION

WESTCLIFF UNIVERSITY (Master's degree Computer Science)  
Irvine, California

*Jun 2023 - Jun 2025*

- IT Project Management: Acquired skills in project planning, execution, and delivery within time and budget constraints. Familiarity with project management methodologies and tools.
- Managing Information Systems & Technology: Developed an understanding of information systems management, including database management, network architecture, and system security.
- Management Information Security: Gained expertise in assessing and mitigating security risks, implementing security policies, and ensuring compliance with regulatory standards.

## PROJECTS

JAMIA HAMDARD UNIVERSITY (FINAL YEAR PROJECT)

Automated Ground Vehicle (<https://github.com/amaanabbasi/projectpi>)

*Jan 2021 - Jun 2021*

- Proficient in implementing computer vision and image recognition techniques to enable autonomous driving capabilities in ground vehicles.
- Skilled in utilizing Raspberry Pi, RC car, and camera setups for developing IoT solutions in real-world applications.
- Experienced in integrating Python programming language with OpenCV and Keras frameworks to process image data and train deep learning models.
- Capable of developing frameworks for effective data collection and model training to enhance the performance and safety of autonomous vehicles.
- Knowledgeable in utilizing networking protocols such as sockets for seamless communication between vehicle components and external systems.

## EUROPEAN UNION DIGITAL LIBRARY

Automatic License Plate Detection & Recognition

*March 2021*

(<https://eudl.eu/doi/10.4108/eai.27-2-2020.2303122>)

- Developed a lightweight model for license plate detection and character recognition using Python, leveraging OpenCV for image processing and YOLOv3 for object detection.
- Implemented state-of-the-art techniques in segmentation and recognition to enhance the accuracy and speed of the detection pipeline.
- Utilized deep learning frameworks such as Keras and TensorFlow for training models and optimizing performance.
- Addressed challenges in dataset collection by employing a naive approach, minimizing data requirements while maximizing model effectiveness.
- Provided a scalable solution for automating license plate recognition, suitable for deployment in various environments like campuses, airports, and shopping complexes for intelligent surveillance systems.