## **UTSAV CHAUDHARY**

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#### **EDUCATION:**

**Binghamton University (SUNY)** 

MS in Computer Science (Algorithms, Data Structure, Data Mining & Analytics, Database Systems)

Aug 2022 - Dec 2023 GPA: 3.44/4

Jul 2016 - Jun 2020 GPA: 8.09/10

Universal College of Engineering Bachelor's in Computer Engineering

### **TECHNICAL SKILLS:**

OS: Linux (CentOS, Ubuntu, RedHat, Debian), Windows, MacOS, Raspberry Pi OS

Lang& Script: Python, Java, .NET, C#, SQL, HTML, Shell, PowerShell, Ruby, JavaScript, Jinja, Groovy, YAML

Databases: Oracle, MongoDB, MySQL, CosmosDB, PostgreSQL, Firebase, Cassandra

Tools: Azure, AWS, Docker, Kubernetes, Jira, Shell, Bash, Automation, NodeJS, jQuery, Django, Flask, FastAPI, Pandas, Selenium, Beautiful Soup, Pytest, Scrapy, XML, Nginx, Apache HTTP, JSON

Additional: ReactNative, Unity3D, Android Studio, Arduino, IoT, TensorFlow, OpenAPI, Agile, Scrum

Certifications: Azure DevOps AZ-400, Python-Michigan, IT Automation -Google, TensorFlow -DeepLearning.AI,

Data Structure, Data Science, Machine Learning & Al

### **PROFESSIONAL EXPERIENCE:**

# Midh Technologies, (Remote, USA) | Python Web Software Developer - DevOps RESPONSIBILITIES

Feb 2024 - Present

- Developed high-performance **RESTful APIs** using **Python** and **Flask** framework on **Azure Cloud**, for finance **data transactions**.
- Developed **JSON**-based services adhering to JSON Schema specification for precise validation and structuring of financial data payloads, ensuring **data integrity** and compliance. Integrated **Azure Redis Cache** for implementing caching strategies.
- Architected scalable and secure **backend** services using Flask within **Azure App Service**, deploying RESTful APIs and integrating **OAuth 2.0** authentication with role-based access control (**RBAC**).
- Designed and implemented interactive web interfaces using **HTML**, **CSS**, **JavaScript**, and **jQuery**, optimizing user interaction and visualization of financial **data dashboards** and **reporting tools**.
- Created comprehensive **test cases** using tools like **pytest** and **unittest** to validate functionality, performance, and security, Integrating the **test cases** in the DevOps **Pipeline** build for **testing environment**. Utilized **Postman** for rigorous **API testing**.

## <u>Compendious Medialabs Pvt. Ltd. (Mumbai, IN) | Python Data Engineer (I)</u> RESPONSIBILITIES

Sept 2021 - Aug 2022

- Developed robust Python scripts for automated **data scraping** of news feeds using libraries such as **BeautifulSoup** and **Scrapy**. Implemented and developed **Selenium** Headless in **AWS EC2**, for scheduling additional **data extraction** of news from sources.
- Tested and Implemented **data filtering** techniques in Python utilizing **NumPy** and **Pandas** for cleaning and **preprocessing** data.
- Developed a data dashboard using the **Django** framework in Python, integrating dynamic data updates from **DynamoDB**. We utilized **D3.js** and **Chart.js** for creating interactive and live **charts** and **graphs** based on filters.
- Assisted in developing a scalable scraping bot on **AWS Lambda**, integrating with **CloudWatch** for scheduling and monitoring.
- Supported Natural Language Processing (**NLP**) tasks in Python, using **NLTK** and **spaCy** to classify news articles by genre and sentiment, NLTK and spaCy to **classify** news articles, enhancing skills in text analysis and categorization.

## underDOGS Gaming Studio (Mumbai, IN) | Python Backend / Game Developer (I) RESPONSIBILITIES

Dec 2019 - June 2020

- Integrated and optimized the **Quarters API** across multiple games, facilitating seamless universal gaming currency transactions as part of a **POC** and creating player wallets, conducting secure transactions, converting points to quarters.
- Developed Python scripts to integrate third-party APIs for cloud storage, social media sharing, and payment gateways.
- Assisted in implementing **secure transaction methods** integrating with **Unity3D**, leveraging API best practices to safeguard in-game currency transactions and protect user data privacy. Identified and resolved critical **bugs** in existing API codebases

- Tested API integration improving real-time data sync and communication between clients and servers using Python and C#.
- Helped in optimizing API response times by **refactoring code** and implementing **caching strategies**, and implemented unit tests to validate API functionalities, ensuring reliability and minimizing **regression** issues across iterative game updates.

#### **PROJECT EXPERIENCE:**

### AutoGramBot (Video Create/Upload) Python, Flask, Azure, APIs, FFMPEG, Selenium [Instagram Profile]

Developed Python script to automate Video Creation and Uploading (English Teaching Reels) on Instagram. Collecting raw videos using PlayPhrase.me API. Implemented FFMPEG to seamlessly overlay logos, images, and merge multiple video clips with professional-grade transitions, achieving a polished, desktop-like editing quality. Integrated WhisperAl API for automated subtitle generation, ensuring accurate timestamp and relevance. Used Pillow and FFMPEG to embed subtitles into videos at timestamps. Utilized Google Drive API for storing and organizing finalized videos, ensuring Free and scalable cloud-based storage. Managed video URLs in Azure Blob Storage in JSON format. Orchestrated workflow using Azure Logic Apps to automate video processing tasks. Integrated Logic Apps with Azure services for seamless task coordination, ensuring efficient and timely video production. Automated Instagram video uploads and configuration using Selenium. Managed login, video upload, and description configuration on the Instagram platform, enhancing social media content management.

### AssignmentX | Python, NumPy, Pillow, Flask, Android Studio [

Developed "AssignmentX," an **Android** / **Web** application leveraging Python, NumPy, Pillow, Flask, and Android Studio to create handwritten-like assignments. Achieved over **5000+ downloads** on **Play Store**, with 200+ daily active users and **32K+ YouTube** views, showcasing widespread adoption and user engagement. Utilized **Pillow** and **OpenCV2** for precise image processing of alphabet images to **simulate** handwritten pages within the application. Implemented a **human behavioral algorithm** to enhance the authenticity of the **handwritten appearance** of generated assignments. Designed and deployed a **Python-based backend** server hosted on **AWS VMs**, facilitating communication between the **Android app** and **central server**. Integrated **Flask** to develop a **Web API** enabling seamless interaction between the **mobile app**, **website**, and **backend services**. Implemented **SMTP** for email functionality, enabling users to send assignments as **PDF** attachments directly from the application.

### EDU-AR | Unity 3D, Android Studio, AR Core, Tensorflow, Pandas, NumPy, Matplotlib, Keras

Developed "EDU-AR," an **Android** application targeting preschoolers with cognitive challenges, incorporating features for hearing and speech aid. Implemented **Augmented Reality** (AR) using **AR Core** in **Unity3D** and integrated Deep Learning models, specifically **CNNs** achieving 95% accuracy, utilizing **TensorFlow** and **Keras** for image processing tasks. Integrated **Google Vision API** for Handwriting Analysis **OCR** to facilitate automatic **recognition** and **interpretation** of handwritten content within the application. Assisted with **Sign Language interpretation**, enhancing accessibility for users with hearing impairments. Authored and published a paper in the international journal **IOSRJEN** (May 2021, Volume 11, Issue 5, E-ISSN: 2250-3021), detailing the technical advancements and educational benefits of the **EDU-AR** application.