UTSAV CHAUDHARY

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EDUCATION:

Binghamton University (SUNY) **Aug 2022 - Dec 2023**
MS in Computer Science (Algorithms, Data Structure, Data Mining & Analytics, Database Systems) **GPA: 3.44/4**

Universal College of Engineering **Jul 2016 - Jun 2020**
Bachelor's in Computer Engineering **GPA: 8.09/10**

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 & AI

PROFESSIONAL EXPERIENCE:

Midh Technologies, (Remote, USA) | Python Web Software Developer - DevOps
RESPONSIBILITIES Feb 2023 - 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**.

Compendious Medialabs Pvt. Ltd. (Mumbai, IN) | Python Data Engineer (I)
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 **WhisperAI 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.