

# UTSAV CHAUDHARY

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## Education

State University of New York at Binghamton  
Master of Science in Computer Science

Aug 2022 – Dec 2023  
3.44/4.00 GPA

## Experience

Software Engineer, Midh Technologies, TX

Feb 2024 - Present

- Assisted in fine-tuning **Llama 3.2 model** on **Azure Kubernetes Service (AKS)** for scalable, low-latency inference. Built secure **RESTful API** endpoints with **FastAPI**, utilizing **Azure API Management** for auth, rate-limiting, and scalability.
- Developed an interactive analytics dashboard, using **React.js** and **D3.js**, featuring advanced visual analytics and **RBAC** through **Azure Active Directory** and **Azure DevOps** for seamless deployment and updates.
- Developed official company website using **Next.js**. Implemented dynamic CMS with **RBAC** for admin functionalities & updates. Configured SMTP with **Azure Communication Services** & utilized **Azure App Service** for hosting.
- Implemented a user profile dashboard by integrating **Fireblocks SDK** & **Metamask**, enabling on-chain ID creation to streamline user interactions with blockchain assets. Deployed secure and scalable APIs using **Azure Functions**.

Python Web Developer I, Compendious Medialabs Pvt. Ltd., IN

June 2021 - July-2022

- Developed an in-house **data scraping application** using **Python**, **Selenium**, **RestAPI**, and **Beautiful Soup**, building a **data pipeline** and leveraging **Azure Cloud** for **data storage**, **analysis**, and **marketing automation**.
- Used **NLTK** and **spaCy** for **NLP tasks**, including **text preprocessing** & **classifying data**, improving **accuracy** & **efficiency**.
- Developed a **data dashboard** using the **Django framework** in **Python**, integrating **dynamic data updates** from **CosmosDB**. Utilized **D3.js** and **Chart.js** to create **interactive** and **live charts** and **graphs** based on **filters**.
- Tested and implemented **data filtering techniques** in **Python** utilizing **NumPy** & **Pandas** for **cleaning** & **preprocessing data**.

Game Developer Intern, underDogs Gaming Studios, IN

March 2019 - July 2019

- Integrated and optimized the **Quarters API** across multiple games, facilitating seamless universal **gaming currency transactions** as part of a **POC** creating **player wallets**, conducting **secure transactions**, and converting **points to quarters**.
- Tested **API integration**, improving **real-time data sync** & **communication** between **clients** & **servers** using **Python** and **C#**.
- Assisted in implementing **secure transaction methods** integrating with **Unity3D**, exp in **API best practices** & **bug fixing**.

## Projects

AutoGramBot (Generate/Upload) | Python, Django, Azure, APIs, FFMPEG, Selenium

[ Instagram Profile ]

Developed a **Python-based** automation pipeline to dynamically **generate** and **upload English Teaching Reels on Instagram**, utilizing the **PlayPhrase.me API** for raw video collection. Integrated **FFMPEG** for advanced video editing (**overlays**, **image insertion**, and **transitions**), leveraged **WhisperAI** for **generating subtitles** with precise timestamps. Stored processed video URLs in **Azure Blob Storage**. Orchestrated the entire video workflow and **deployment automation** using **Azure Logic Apps** and **CRON jobs**, creating a fully automated, **human-less bot** workflow. Automated **Instagram uploads** using **Selenium**, ensuring **seamless video deployment** and content management within a continuous integration pipeline.

AssignmentX | Python, NumPy, Pillow, Django, Android Studio

[ YouTube ]

Developed "**AssignmentX**", an Android/Web app utilizing **Python**, **NumPy**, **Pillow**, **Django**, and **Android Studio** to generate handwritten-like assignments. Achieved **5000+ downloads** and **200+ DAUs**. Leveraged **Pillow** and **OpenCV2** for **OCR-based image processing**, integrating a **human behavioral algorithm** to simulate natural handwriting variations. Deployed a scalable **Python RESTful API backend** on **Azure**, utilizing **App Services**, **SQL Database**, and **Blob Storage**. Integrated **Django** for seamless mobile-web-backend interaction. Enabled **SMTP** for real-time email functionality, allowing users to send dynamically generated **PDFs of assignments**. Optimized performance with **multi-threading** and **caching**.

## Technologies

**Languages:** Python, JavaScript, Java, TypeScript, C++, C#, Rust, Bash, PowerShell, R, Go, Ruby, Swift

**Web Technologies:** React, Flask, NextJS, NodeJS, Django, FastAPI, Express, ASP.NET, Angular, HTML, CSS, Jinja, YAML

**Databases:** SQL, PostgreSQL, Azure SQL, Redis, AWS RDS, MongoDB, DynamoDB, Firebase, Firestore

**Cloud & DevOps:** Azure, AWS, CI/CD, Kubernetes, Docker, Jenkins, Terraform, Ansible, PowerShell, Yarn, NPM, Azure Functions VM Blob, AWS Lambda S3 EC2, RBAC.

**Operating Systems:** Windows, Linux (CentOS, Ubuntu), macOS, Embedded Systems, RaspberryPi, Arduino

**APIs and Protocols:** REST APIs, OpenAPI, Swagger, WebRTC, SOAP, GraphQL, MQTT, WebSocket, OAuth, JSON-RPC

**Other Tools & Technologies:** Kafka, Jira, GitHub, Nginx, VSCode, Azure AKS, Metamask, Fireblocks, Cron, WebSockets