



# SASHIT VIJAY

✉ sashitvijay@gmail.com     Sashit Vijay     sashitvijay     sashitvijay.com     +1-602-815-1761

## Education

---

### Arizona State University

May 2025

B.S. Computer Science, Ira A. Fulton School of Engineering

- GPA: **4.0** | **Summa Cum Laude** | **Moer Award** – Top 1% of graduating class | **Dean's List** all 8 semesters
- **NAMU Scholar** (2021–2024) | **IEEE Scholar** (2021–2023) | Captain, ASU Men's Ultimate Frisbee

## Experience

---

### Deel Inc.

2026 – Present

LLM Test-Authoring Evaluator

- Developed reproducible **LLM evaluation benchmarks** for test-authoring agents, improving task quality through rubric-calibrated scoring targets of **80%+** for frontier models and **25–50%** for baseline models using Dockerized Harbor sandboxes, hidden RewardKit rubrics, oracle diffs, and regression-guarded test scenarios.

### Bytewerx LLC – Tnect Validation API

Aug. 2024 – May 2025

Fullstack Developer (Co-Op)

- Built a secure API management platform using **Angular, ASP.NET Core, TypeScript, and Redis**, featuring scoped API key generation and **role-based access control (RBAC)** for multi-tenant usage.
- Engineered **Redis-backed rate limiting** and **TypeScript-typed** service layers to prevent abuse and ensure scalable, maintainable API access control across the platform.
- Delivered a **real-time analytics dashboard** visualizing API key usage, enabling users to monitor activity and identify integration issues – reducing time-to-debug for API consumers.

### Laboratory for Learning Evaluation of Autonomous Systems (LLEAS), ASU

Oct. 2024 – Jul. 2025

Research Assistant

- Developing a **Unitree Go2 robotic dog** assistant with real-time diffusion-based navigation and **LLM-powered command processing**; integrated obstacle avoidance achieving sub-200ms response latency in controlled environments.

### PI Academy

May 2024 – Jul. 2024

Software Engineer Intern

- Built a food waste classifier across **400+ categories** using image analysis; improved model accuracy by **9%** via ensemble learning, directly improving downstream waste management efficiency.

## Projects

---

### CorpusForge– GPT-Style LLM | *PyTorch, Transformers, tiktoken, FastAPI, HuggingFace*

2026

- Built and trained a **decoder-only GPT-style transformer** from scratch with multi-head causal self-attention, Pre-LayerNorm blocks, GELU activations, GPT-2 BPE tokenization, weight tying, and scaled residual initialization.
- Scaled the model from a **1M-parameter** character-level baseline to a **54M-parameter** OpenWebText model trained on **50M tokens**, using AdamW, cosine LR decay, warmup, gradient clipping, and Kaggle T4 GPU training.

### Onsight – NLP Analysis System | *Python, PyTorch, Scrapy, Transformers, spaCy, Gradio*

2025

- Engineered a **Scrapy-based web scraper** that crawled **1,000+ pages** of structured wiki data, parsing nested HTML to produce a clean, labeled corpus for downstream NLP pipelines.
- Built an end-to-end NLP system with zero-shot **theme classification**, NER-powered character network extraction, and a fine-tuned **HuggingFace classifier** – all surfaced via an interactive Gradio dashboard.

### SoccerSense | *Python, YOLOv8, PyTorch, OpenCV, KMeans, Pandas*

Jun. 2024 – Aug. 2024

- Built a live soccer analytics pipeline using YOLO-based tracking, perspective transforms, and clustering; achieved **82% accuracy** on real-time team and individual player stat generation.

### ThreadIt | *MongoDB, Express.js, React.js, Node.js, Docker*

Nov. 2023 – Dec. 2023

- Developed a Reddit-inspired social platform on the **MERN stack**; scaled to **1,000+ registrations** and **200+ communities** with fuzzy search and **Docker**-containerized production deployment.

## Achievements

---

### IEEE Engineering Grant

Fall 2021

1st place in IEEE competition; secured **\$5,500** in funding for an engineering project proposal.

### USA National Beach Ultimate Championship

May 2023 & 2024

Ranked **3rd nationally** (2024) and **4th nationally** (2023) representing ASU at IBUXCC.

## Technical Skills

---

**Languages:** Python, JavaScript, **TypeScript**, Java, C++, C, SQL, CSS

**Frameworks & Libraries:** **React.js**, Node.js, Angular, Express.js, Django, Flask, PyTorch, OpenCV, scikit-learn, spaCy, HuggingFace Transformers, Numpy, Pandas, Scrapy

**Infrastructure & Tools:** **AWS (EC2, S3)**, Redis, MongoDB, PostgreSQL, **Docker**, Git, ASP.NET Core, Gradio, CI/CD

**Fields:** Full-Stack Development, Machine Learning, NLP, Computer Vision, REST APIs