Oliver Grabner

८ (669) 271-9070 | ☑ olivergrabner.cs@gmail.com | **in** linkedin.com/in/olivergrabner | **Q** github.com/OliverGrabner

EDUCATION

TEXAS A&M UNIVERSITY

Bachelor of Science in Computer Science

Expected May 2027

GPA - 4.00

• Goldman Sachs Excellence Scholarship

EXPERIENCE

Samsung Semiconductor

May 2025 - August 2025

Software Engineer Intern

Austin, TX

- \bullet Reduced API response times by 63% by engineering 5 asynchronous FastAPI endpoints for concurrent processing of large-scale FAB data from secure AWS S3 data lake, enabling real-time analytics
- Developed a full-stack Streamlit dashboard to automate system access audits, reducing weekly manual work by 97% (2 hours to 3 minutes) and ensuring 100% compliance by eliminating manual errors
- Engineered an AI Agent (Llama 3 70B) with a LangChain router that translates user requests into Python code executed in a secure sandbox for data analysis on 9 data sources or into function calls for workflow automation
- Architected a reusable RAG platform to deploy specialized workflow chatbots, integrating advanced query rewriting and hybrid search (BM25 and FAISS) to deliver relevant, domain-specific answers

Undergraduate Researcher

September 2024 – Present

Texas A&M University - InfoLab

College Station, TX

- Researching and developing a multi-modal recommender system fusing speech, LLM, and collaborative signals
- Implemented a chunk segmentation pipeline for feeding long-form transcripts into LLMs; boosted F1 performance by 18% and halved variance on 1-7B parameter models in disfluency removal tasks
- Automated benchmarking of 11 open-source LLM variants (1B 70B parameters) using Python + HuggingFace infrastructure to log ROUGE and BERTScore for every k-shot setting

AncientScript

June 2024 – August 2024

Data Science Intern

Cedar Park, TX

- Developed a comprehensive torchvision augmentation pipeline for historical handwritten records, expanding the effective training set 3x and improving test accuracy 4 pp by discouraging spurious correlations
- Built a data processing function to transform annotated polyline underlines into normalized tensors, feeding a U-Net model the training data required to reach a 94% realism score

PUBLICATIONS

M. Teleki, S. Janjur, H. Liu, **O. Grabner**, et al. "Z-Scores: A Metric for Linguistically Assessing Disfluency Removal." *IEEE ICASSP 2026* (Under Review)

M. Teleki, S. Janjur, H. Liu, **O. Grabner**, et al. "DRES: Benchmarking LLMs for Disfluency Removal." *IEEE ICASSP 2026* (Under Review)

PROJECTS

Boba Shop POS System | Java, Swing, PostgreSQL, AWS

October 2025

- Developed a full-stack Java POS system with a Swing GUI client and a cloud-hosted AWS PostgreSQL backend
- Scripted the generation of \$5M+ in realistic sales data to test and populate a relational PostgreSQL schema
- Implemented a manager dashboard, authoring 15+ SQL queries to generate reports on sales trends and inventory

Pokemon Card Generator | Link | Python, FastAPI, PyTorch, Docker, Render, Vercel

March 2025

- Trained a Deep Convolutional GAN (DCGAN) in PyTorch on 11,000+ images to generate novel 96x64 cards
- Designed an async FastAPI endpoint serving in-memory PyTorch tensors as base64, creating a file-less architecture
- Established a dual-platform CI/CD (Vercel + Render) to deploy a Dockerized backend within RAM constraints

TECHNICAL SKILLS

Languages: Python, C++, Java, SQL, JavaScript, HTML, CSS, Assembly

Frameworks & Libraries: FastAPI, Django, Flask, React, Vite, Tailwind CSS, Pandas, Matplotlib, Streamlit, PyQt5

Tools & Technologies: Docker, AWS S3, boto3, Git, Kubernetes, asyncio, Netlify, GA4, Confluence

Machine Learning: PyTorch, LangChain, HuggingFace, OpenCV, NumPy, torchvision, scikit-learn, OpenAI API