Tomer Sedan

Software Engineer Intern
Palo Alto, CA

Email: tsedan@proton.me
Phone: (650) 733 3326
Website: tsedan.github.io

WORK EXPERIENCE

Software Engineer Intern, Snowflake **January 2025 - Present**
- Improving customer trust in disaster recovery systems, reducing team-wide refresh incidents by 40%.
- Shipping new features for automatic dangling reference detection and resolution in replication.

Research Assistant, Stanford **May 2024 - December 2024**
- Combined H.264 with learned image compression models, using IDR-frame replacement to lower bitrates.
- Directly modified underlying bit representations of H.264 NAL units to support real-time applications.

Project Management Lead, Advanced Vehicle Team **January 2024 - December 2024**
- Led a student-run organization to build an L4 self-driving vehicle for SAE's AutoDrive Challenge II.
- Managed over 50 students across 6 departments in competition planning and execution efforts.

Software Engineer, Advanced Vehicle Team **August 2023 - January 2024**
- Fused LiDAR streams to detect railroad crossings, child pedestrians and to localize dynamic objects.
- Increased FOV by 67% and secured 2nd place autonomous route finish against top teams.

Data Science Intern, Wurl **May 2022 - August 2022**
- Developed an automated analytics reporting framework for 100+ content partners.
- Used Snowflake to pull queried data into Tableau, compiling and sending reports using AWS Lambda.

EDUCATION

Stanford University **September 2025 - exp. April 2027**
Master of Science in Computer Science *Incoming class of 2027*

The Pennsylvania State University **August 2021 - December 2024**
Bachelor of Science in Computer Science, minors in Statistics and Computer Eng. *Summa Cum Laude*

TECHNICAL SKILLS

Languages C++, Java, C, Python, SQL, Bash, Javascript, Verilog, a few flavors of assembly
Software & Tools Snowflake, AWS EC2 & Lambda, LLVM, OpenCV, ONNX Runtime, TensorFlow, SDL2, ROS 2, Git, Linux, Cython, LaTeX
Knowledge Areas Database metadata and replication, multithreaded systems, optimizing compilers, video compression, project management, autonomous vehicles, computer vision

PROJECTS & AWARDS

Undergraduate Honors Thesis, Schreyer Honors College **December 2023 - December 2024**
- Title: Effective Utilization of Compile Time in Compute Graph Optimization for Object Detection.
- Year-long research project exploring the efficacy of optimization techniques for heterogenous hardware.
- Culminated in a 40 page thesis, proposing a subset of both theoretically and empirically potent methods.

Evan Pugh Scholar Award, The Pennsylvania State University **February 2024**
- Awarded to the top 0.5% of seniors in the university, as measured by cumulative GPA.

Optimizing Compiler **January 2023 - August 2023**
- Built a bespoke compiled systems programming language in C++ using LLVM.
- Architected language features such as type coercion, intrinsics, and a just-in-time compilation mode.