Timur Gubskiy

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EDUCATION

Princeton University Princeton, NJ
BSE in Electrical and Computer Engineering, *Minor in Computer Science* May 2025

- GPA: **3.93/4.00**
- *Relevant Coursework***:** Machine Learning, NLP, Computer Vision, Data Structures & Algorithms, Programming Systems, Blockchain, Information Security, Probability and Stochastic Processes, Computer Graphics, Circuit Design, Signals, Wireless Communication, Linear Algebra, Origami Engineering

AWARDS

- Hack Princeton Best Overall Project and $1000 Grant from 1517 Ventures, *for FlameNet* 2022
- FIRST Robotics Competition Deans List Award Winner, *selected among 100,000 students worldwide* 2020
- Best Computer Science Project and Canada Wide Science Fair Silver Medalist, *for AI Driver Assistant project* 2018

SKILLS

- **Programming Languages:** Python, JavaScript, Java, C, C++, Rust, Swift, Verilog, PHP, HTML, CSS
- **Technologies:** ReactJS, NodeJS, MongoDB, Firebase, SQL, Bootstrap, Express, Passport, EJS, RESTful API, jQuery, AJAX, TensorFlow, PyTorch, OpenCV, Pandas, NumPy, Linux, Bash
- **Technical Skills:** PCB Design (KiCAD/Altium), CAD (Fusion, NX), Embedded Systems, Manufacturing, Data Analytics

PROFESSIONAL EXPERIENCE

AFTI WatchDog Calgary, Alberta
Data Analytics Intern May. 2023 – Aug. 2023

- Developed a Multilabel Image Classification model using PyTorch to identify flaws in image quality with 95% accuracy.
- Integrated my project into the existing Image Processing Pipeline to automatically trigger defrosting commands when images are classified to be frosted over or covered in dew.
- Improved customer experience by reducing overall number of unclear images served to the end-user.
- Created comprehensive documentation, facilitating the understanding and usage of the Image Classification model, thereby leaving a lasting impact on the company's capabilities even after the completion of the internship.

Unite Tonight Princeton, NJ
Backend Developer Aug. 2022 – May. 2023

- Spearheaded the development and implementation of critical functionalities for the Unite Tonight app, a social networking platform designed to facilitate event organization and attendance.
- Leveraged expertise in PHP and Swift to architect and deploy backend solutions on AWS, playing a pivotal role in bringing the app from conception to successful launch within a tight timeline.

Princeton Racing Electric (FSAE) Princeton, NJ
Chief Engineer for Embedded and High Voltage Sept. 2021 – present

- Organized a team of 100+ skilled engineers in the design, development, and construction of an electric Formula-style race car
- Spearheaded the development of embedded systems and firmware for various vehicle subsystems, enhancing overall vehicle control and facilitating data acquisition capabilities to aid in optimizing the vehicle's performance.
- Led a team of 6 engineers within the high voltage sub-team through the testing and integration of DHX Motors and Emsiso Inverters, implementing control over CAN, and collaborating closely with the Mechanical team to facilitate integration.

SELECTED PROJECTS

Distributed Network Wildfire Detection System for Hack Princeton: FlameNet *Hardware (Esp32), React, Firebase, Twilio*

- Developed a working prototype of a distributed network of nodes connected via Bluetooth and Radio creating a robust communication system capable of early wildfire detection in areas without developed infrastructure.

2D to 3D Augmented Reality Art Converter for eCommerce (VirtuoCart.com) *Blender, NodeJS, MongoDB, Stripe API*

- Created a blender python script for converting 2D jpegs to framed 3D .glb files.
- Coded a web app, using Stripe for payment integration, to let users convert art and embed an AR viewer into their web store.
- Learned how to build a web server in my basement to run the web app and blender server, lowering operation costs.

TigerLaunch Entrepreneurship Club Applicant Judging Platform *React, Firebase, GoogleMaps API*

- Built a judging platform for VCs to sort through and rank, startup competition applicants.
- Designed and implemented an algorithm to calculate ratings for each startup based on relative VC rankings.

Omnidirectional Drivetrain Using Custom Designed Swerve Drive *Fusion 360, RasberryPi 3, Python*

- Designed an extremely maneuverable custom swerve drive robot that can be assembled from 3D printed and laser cut parts.

CAMPUS ACTIVITIES

Tiger Launch: Tech Director; **TapCats:** Vice President; **Canada Club:** Treasurer; **Cyber Security Club:** Member