+1 (347) 291-3365
tamirz@vt.edu
LinkedIn: @tamirlanz

Tamirlan Zharmagambetov

English - Fluent
Russian - Native
Kazakh - Native

B.S. Virginia Polytechnic Institute and State University (Virginia Tech) 2022 - 2026 (GPA: 3.4)
Degree: Computer Engineering
Major: Controls, Robotics, and Autonomy | Minor: Machine Learning and Artificial Intelligence

RELEVANT EXPERIENCE:

Software Engineering Intern | Basis | May 2024 – Sep 2024

- AI Fine-Tuning & Prompt Optimization: Used both real and synthetic data and Automatic Prompt Optimization with "Gradient Descent" to improve the accuracy and efficiency of LLMs
- Software Development: Collaborated on software projects in Python, built embedded applications using Retool software, and navigated the SQL databases using complex queries.
- Collaborated with AI experts on building 'Prompt Olympics' to enhance Python script development for creating testing environments and training models in an AI-driven workplace.

Sustainability Intern | Virginia Tech Office of Sustainability | Aug 2023 – Aug 2024

- One of the 30 students given this opportunity to help our environment
- In charge of collecting plastic waste on campus and delivering it to recycling facilities
- Working on the automation of recycling factories near Blacksburg

Assistant to the Chief Financial Officer | MOST Ventures | Jun 2023 – Aug 2023

- Assisted CFO in evaluating Pre-seed/Seed IT startups across 6 countries.
- Conducted thorough reviews and analyses of startup viability and growth prospects.
- Participated in startup pitching meetings, gaining insights into venture capital dynamics.
- Reviewed applicants for the MOST accelerator program, contributing to selection decisions.
- Developed a comprehensive understanding of venture capital operations and startup investing.
- Honed analytical and decision-making skills in a fast-paced environment.

Robotics Specialist | ORBI Inc. | Jun 2021 – Aug 2021

- Researched Semi-Autonomous delivery vehicles
- Worked alongside the company's CEO Adil Suranchin
- Prototyped the robot using Fusion 360 3D and printed using PETG filament
- Worked on the development of the robot's virtual control software using C++

RELEVANT PROJECTS:

"Home Audio System" | August 2024 – December 2024

- Designed a three-band graphic equalizer using fourth-order Butterworth filters (100 Hz–8 kHz).
- Developed a Class-D amplifier with PWM modulation, diode-based deadtime control, and RLC filtering.
- Programmed an Arduino for 80 kHz PWM carrier wave and OLED real-time spectrogram display.
- Conducted circuit simulations and testing using LTSpice and WaveForms
- Integrated and optimized subsystems including the equalizer, amplifier, and microcontroller display

VT Formula SAE | Sep 2022 – Feb 2023

- Design electronic systems in Altium Designer for the Formula SAE racing car.
- Use Siemens NX to build CAD designs of circuit boxes
- Ensure reliability and safety compliance of circuitry.
- Collaborate with teammates to integrate sensors and control systems.
- Troubleshoot technical challenges and optimize designs for peak performance.

SKILLS:

C++	PyTorch	Altium Designer	MatLab
Python	SolidWorks	Linux	VS Code