

Nikita Ovramenko

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SUMMARY OF QUALIFICATIONS

- Practical experience in programming with Java, Python, and C/C++, and developed projects using JavaFX, Python (with aiogram) and web technologies.
- Have experience in MongoDB, and Linux, with strong knowledge in digital design and embedded systems.
- Demonstrated leadership by managing multiple team projects.
- Seeking a challenging engineering role to apply technical and interpersonal skills in creative projects.

EDUCATION

Toronto Metropolitan University

Toronto, ON

Bachelor of Engineering in Computer Engineering; CGPA: 3.05/4.33

Sep. 2022 – May 2026

PROJECTS

Home Server and Online Store Bot | Raspberry Pi, Python, MongoDB

August 2024 – Present

- Configured a **Raspberry Pi** home server with OpenMediaVault, providing secure storage for 2TB of data.
- Developing an online store accessible via Telegram and a web interface using **aiogram**, allowing users to interact with the bot and explore available options.
- Developing a **Python-based** Telegram bot that allows users to sign up and **saves their information in MongoDB**, making it easier to manage and retain user data.
- Integrating a user interface with functional buttons for streamlined navigation; the "Shop" feature is currently under development, while other buttons are fully operational.

BJT Amplifier Design | Multisim, Verilog, Circuit Analysis

January 2024 – April 2024

- Designed a 3-stage CE-CE-CC BJT amplifier to meet specifications, including a gain of 50 ($\pm 10\%$), a frequency response of 20 Hz to 50 kHz, and input resistance above 20 k Ω .
- Performed manual calculations for resistor and capacitor values to meet design criteria while minimizing distortion.
- Simulated and analyzed circuit characteristics using Multisim, validating performance metrics such as quiescent current and loaded voltage gain.
- Addressed design challenges like biasing and Q-point selection to optimize output swing and minimize errors.

General-Purpose Processor Design | Verilog, Quartus II, Digital Logic

December 2023

- Collaborated on designing a simple **general-purpose processor**, demonstrating core digital logic principles.
- Developed components such as latches, a finite state machine (FSM), and a 4:16 decoder to manage binary input states and produce accurate outputs.
- Implemented an Arithmetic Logic Unit (**ALU**) capable of performing multiple operations including sum, difference, bitwise XOR, and binary shifts.

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, C#, JavaScript, HTML/CSS, MATLAB

Frameworks: JavaFX, JUnit, aiogram

Developer Tools: NetBeans, Visual Studio, Replit, Geany, SceneBuilder

Databases: MongoDB

Hardware and OS: Raspberry Pi 4, Linux, OpenMediaVault