Boris Ermakov-Spektor

COMPUTER ENGINEER · SOFTWARE DEVELOPER

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Education

University of Florida   *Gainesville, Florida, USA*

B.S. IN COMPUTER ENGINEERING   *Aug. 2017 - 2021*

- **GPA: 4.00/4.00**
- Completed Coursework: Programming Fundamentals I/II, Applications of Discrete Structures, Computer Organization, Computational Linear Algebra, **Data Structures and Algorithms**, **Digital Logic and Computer Systems**
- In-Progress Coursework: **Operating Systems**, **Intro to Software Engineering**, **Circuits 1**, **Penetration Testing(Ethical Hacking)**

Employment

Data Structures Undergraduate Teaching Assistant   *Gainesville, Florida, USA*

UF CISE   *Aug. 2019 - PRESENT*

- Hold office hours to assist students with class projects and clarify content.

Software Engineering Intern   *Miami, Florida, USA*

MATRIX LABS   *May. 2019 - Aug. 2019*

- Enabled NFC support for the MATRIX platform through designing and developing a C++ abstraction with Cmake.
- Contributed to MATRIX community with up to date documentation.
- Conducted QA testing for crucial services.

Computer Organization Undergraduate Teaching Assistant   *Gainesville, Florida, USA*

UF CISE   *Jan. 2019 - May. 2019*

- Lead discussion section once a week to explain class topics and proctor weekly quiz.
- Held weekly office hours to assist students with class projects and clarify content.
- Created guides for setting up QEMU emulator.

Software Engineering Intern   *Miami, Florida, USA*

ADMOBILIZE   *May. 2018 - Jul. 2018*

- Created the majority of end-user documentation with examples in Markdown for entire C++ API.
- Wrote scripts in Bash for improving device provisioning and setup, reducing deployment time by half.
- Added user-facing features to C++ API, simplifying user experience.
- Worked with development team to help implement and test improvements to mission-critical software in Node.JS.

Hardware Contributor   *Miami, Florida, USA*

ADMOBILIZE   *Aug. 2015 - Jul. 2017*

- Optimized deployment of software onto Linux-based devices.
- Lead inventory management and device assembly.
- Wrote in-house documentation detailing device assembly.
- Developed and tested improvements in device assembly.

Extracurricular Activity

MIL UF (Machine Intelligence Lab)   *Gainesville, Florida, USA*

MEMBER   *Aug. 2018 - PRESENT*

- Gained knowledge in ROS (Robot Operating System) and Python.
- Implemented the communications protocol for use in the RobotX competition
- Modified judging GUI using Qt and C++

Projects

Light & Fan Dimmer

PERSONAL PROJECT

- Made an IOT light switch using an ESP32, a MATRIX Voice dev board, and a Triac controller.
- Used Eixir and Phoenix to host server on Raspberry Pi which communicates with ESP32 over Websockets.
- Created a GUI in React to control Light and Fan connected to Triac.

Slack Bot

PERSONAL PROJECT

- Wrote a slack bot for text manipulation commands.
- Used Javascript with Serverless framework, and hosted bot on AWS Lambda.
- Learned Regex for parsing slack tokens.

Symbolic Calculator

CLASS PROJECT

- Team project where we designed a symbolic calculator using fractions for computation instead of floating point.
- Implemented postfix notation parser and helped implement shunting yard algorithm.

Skills

Computer Lang.	C++(Skilled), Node.JS/JS(Familiar), HTML(Familiar), Python(Familiar), Java(Familiar), Bash(Skilled), Elixir(Beginner)
Frameworks	React(Familiar), Flask(Beginner), QT(Beginner), Phoenix(Beginner)
Software	Linux, Mac OS, Windows, SolidWorks, Git, Cmake, LaTeX, Markdown
Spoken Lang.	English, Russian(Conversational)