# **Boris Ermakov-Spektor**

COMPUTER ENGINEER · SOFTWARE DEVELOPER

1810 NW 23rd Blvd Apt.236, Gainesville, Florida 32605

□ (305) 467-8502 | **S**b.ermakovspektor@ufl.edu | **G**BSpwr | **G**BSpwr

## **Education**

**University of Florida** 

Gainesville, Florida, USA

Aug. 2017 - 2021

B.S. IN COMPUTER ENGINEERING GPA: 4.00/4.00

- Completed Coursework: Programming Fundamentals I/II, Applications of Discrete Structures, Computer Organization, Data Structures and Algorithms, Digital Logic and Computer Systems, Computational Linear Algebra
- 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

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

Aug. 2019 - PRESENT

#### **Software Engineering Intern**

Miami, Florida, USA May. 2019 - Aug. 2019

MATRIX LABS

- 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.

**Computer Organization Undergraduate Teaching Assistant** 

Conducted QA testing for crucial services.

**UF CISE** 

Gainesville, Florida, USA

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 May. 2018 - Jun. 2018

ADMOBILIZE

- · 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** 

- 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.

## Aug. 2015 - Jun. 2017

## **Extracurricular Activity**

## MIL UF (Machine Intelligence Lab)

Gainesville, Florida, USA Aug. 2018 - PRESENT

MEMBER

- 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**

- · 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)