TAFITA RAKOTOZANDRY

111 Quad Drive Lafayette College Box 8804 | rakotozt@lafayette.edu
201-233-8972 | https://www.linkedin.com/in/tafita-rakotozandry/ | https://github.com/rakotozt

EDUCATION

Lafayette College, Easton, PA   Anticipated Graduation: **May 2022**
Bachelor of Science (B.S.): Electrical &Computer Engineering   GPA **3.51**
Relevant Courses: Analog Circuits, Digital Circuits, Analysis and Design of Solid-State Circuits, Signal and Systems, Embedded Systems, Data Structures and Algorithms, Software Engineering

TECHNICAL SKILLS

Programming Languages: JAVA, C, C++, Python, System Verilog, JavaScript, HTML, CSS, Stata
Software: MATLAB, SPICE, Microsoft Office, SketchUp, Blender, Tableau, ArcGIS
Other Skills: Circuit Analysis and Design, Serial Protocols (UART, I2C, SPI, CAN), FPGA and Microcontroller Programing
Language Fluency: English, French, Malagasy, German (Intermediate)

PROFESSIONAL EXPERIENCE

Accenture, Philadelphia, PA   **Jan 2020 – Present**
Electrical Engineer Extern
- Perform a research on how 5G network can help utility companies to optimize the energy production resource

Vitesco Technologies, Toulouse, FRANCE   **Jun 2020 – Aug 2020**
Embedded System Intern
- Contributed to the design of a new circuit board which controls the motors of new model of electric vehicles for a car manufacturer in Germany
- Developed a diagnostic software based on LabView to check if the different prototypes developed meet the industry's requirements

Lafayette College, Easton, PA   **Aug 2019 – Dec 2020**
Information Technology Support
- Assisted students and faculty to troubleshoot technology related problems such as computer network, Moodle access, G-Suite usage, software installation, Microsoft Office

LAAS CNRS, Toulouse, FRANCE   **Feb 2018 – May 2018**
Software Developer Intern
- Analyzed the communication protocol used by the different Uninterruptible Power Supplies (UPS) of the laboratory
- Developed a web application to monitor and control these UPS remotely using Python, PHP, HTML and CSS

PROJECT EXPERIENCE

Pong Game (C)   **Nov 2020 – Dec 2020**
- Replicated the original pong game using PIC 32, LCD Displays and potentiometers
- Developed the state machines of the game and used direct digital synthesis to generate soundtrack

Heart Rate Monitor (FPGA),   **Feb 2019 – May 2019**
- Designed a low-level architecture that process the reading of heart pulse using different logic gates
- Implemented the overall architecture using System Verilog and realized a series of test to validate the project

Maze Robot (C++)   **Mar 2019 – Mar 2019**
- Participated on design of autonomous robot that escapes a maze for the Region 2 IEEE competitions
- Implemented and tested the infrared sensors implemented in the robot

Piezoelectric Shoes   **Jun 2018– Aug 2018**
- Designed a shoe which convert the energy produced by the foot motion into electricity
- Implemented an AC to DC circuit using full wave rectifier and inductive power transmission circuit

LEADERSHIP

LIME Mentor, Madagascar,
Mentor   **Aug 2019 – Present**
- Help students from a local high school in Madagascar to prepare for the SAT and college application
- Led 12 US College students for a trip to Madagascar for the mentorship program

Raspberry Pi Miezaka, Madagascar   **Jun 2018-Aug 2018**
Co-Founder
- Promoted computing learning in rural area where electricity is difficult by building a solar paneled computer based on Raspberry Pi