

# John Arena

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## EXPERIENCE

### Software Engineer

July 2022 – Present

*Clarivate*

*Remote*

- Lead developer on rebuilding an old app with poor performance & reviews to re-release to the public
- Used Dart/Flutter to make app deployable across multiple devices, which led to reduction in repositories to maintain. Proven & now will be reproduced in other projects
- Created Alpha/Beta stages using test groups to resolve bugs & make improvements through feedback
- Created the documentation for the project which helped onboard other developers later on in diff time zone (India)
- 100% pass rate in security vulnerability scan & utilized AWS device farm to decrease overall testing time
- Using cross platform language led to an increase in clients with 5/5 star reviews (iOS, Android, Web)
- VEEVA Integrations - Helped getting an older simulation software working again that was needed in order to produce files that clients needed, which reduced turn around time & reduced errors delivered to clients
- Helped w/ researching older documentation/info in reconnecting Veeva CRM to Promomats to create sandbox environment. This led to reducing turn around time as could test before sending out deliverables
- Created new documentation to help other developers understand how to test the file output in the sandbox
- Went through certification process to further learn & be able to teach the system to other developers

### Information Technology Lead

Jan. 2020 – Sept 2020

*RFCUNY- PS1 Bergen*

*Remote/Brooklyn, NY*

- Resolved 71 existing problems within 5 weeks of starting
- Reduced response time of issues from within a week to within 24-36 hours
- Cleaned out & organized tech storage closet. Created labeling system for organization.

## PROJECTS

### TF2 Sentry | C, Java, Git

Fall 2020 – Summer 2021

- Created a real life working sentry based off the sentry in Team Fortress 2. Prototyped on **STM Nucleo F7**
- Created code to operate the motor controller/stepper motor
- Created a DAC audio system to play sounds through an amplifier to a speaker.
- Created code to make object detection using ultrasonic sensors
- Created & implemented Bluetooth connectivity to communicate to the smartphone PDA app.
- Created a **Java** app for the smartphone to act as the Sentry's PDA. Connects to the STM32F7 via Bluetooth implemented by me. Created GUI & animations for the PDA app.
- Designed **PCB** for the final design with an STM chip, along with a power circuit.
- Tested code & functions using debugging methods along with **oscilloscope**.

### Smart eBike Kit(Senior Capstone) - Team Leader | C++, Python, Git

Fall 2019 – Spring 2020

- A conversion kit which converts a mountain bike into an eBike w/ object detection & a smartphone app.
- Organized weekly team meetings for designs, papers, presentations, etc. Delegated tasks.
- Designed PCBs for eBrake/speedometer sensors, turn signals, & current divider for the DC/DC converter.
- Designed 3D housings for eBrake & speedometer sensors.
- Motor design/placement & simulations of motor performance.
- Created backend code for app setup on Raspberry Pi & for the speedometers & turn signal sensors.
- Testing of 18650 Li-Ion cells for battery pack for the eBike.

## TECHNICAL SKILLS

**Languages:** C, Java, Dart/Flutter, Python, x86, C++, Swift, HTML, CSS, VHDL

**Developer Tools:** Git, Android Studio, Visual Studio, VS Code, XCode, STM32Cube, MATLAB, Quartus, KiCAD, AutoCAD, Rigol Scope 1054Z

**Certifications:** Veeva Systems Certification

## EDUCATION

### The City College of New York

New York, NY

*Bachelors of Engineering in Computer Engineering*

*Feb 2015 – May 2020*

- GPA:3.056