

ROBERT ACACIO

(570)-899-3649 | robert.acacio@fcc.gov | <https://www.linkedin.com/in/robert-acacio-39rules>

WORK EXPERIENCE

FCC Electronics Engineer October 2020 – Present

Office of Engineering & Technology | Federal Communications Commission | Washington, DC

- The FCC's mission is to manage the spectrum and provide leadership to create new opportunities for competitive technologies and services for the American public.
- Serves under the Technical Analysis Branch, roles include assisting senior engineers, conducting and analyzing engineering studies, and performing computer-based projects using various software applications.
- Contribute to preparing important written materials throughout the rulemaking process for consideration by the Chairwoman and Commissioners.
- Radiofrequency (RF) exposure team:
 - Primary responsibility is developing regulations and measurements for evaluating human exposure to RF electromagnetic fields.
 - Actively following several standards organization publications and attending international standard conferences for bodies such as IEC, ICNIRP, IEEE, 3GPP, ANSI, TCB Council, ITU, and other regulatory authorities such as ISED, OFCOM, ARPANSA, ARCEP, and MIC.
 - Provides engineering recommendations and guidance to other FCC bureaus and federal agencies for evaluating and mitigating RF exposure.
- Broadband data collection (BDC) team:
 - Works with staff and contractors to create and implement data collection solutions for mobile and fixed data across the United States.
 - Developed procedures (e.g., OET-75 Bulletin) for third-party mobile speed test app developers to submit proposals for OET review and approval for use in collecting and submitting mobile network performance data as part of the Commission's BDC program.

PROJECTS

Microwave and mmWave Probe Experiments

- Lead researcher on the technical capability of differing RF probe technologies under large electric fields, high peak-to-average-power ratio, and other 5G test scenarios.

Spatial-Averaging Collinear Array Validation

- Performed and created a comparison using a MatLab script validating equations in IEC 62232:2017 and models in FCC technical bulletin OET-65 that are used to compute RF field strengths, power densities, and SAR.

FCC Speed Test App Review

- Test engineer that is actively evaluating and providing technical, data, and UI/UX feedback to app developers.

SOFTWARE SKILLS

Experienced in:

Multisim | LTSpice | MatLab | Ansys | Python | ArcGIS | HTML | LaTeX

EDUCATION

Master of Science in Electrical Engineering

George Washington University | Washington, DC
3.8 GPA | 15 credits toward MS

Bachelor of Science in Electrical Engineering

Florida Polytechnic University | Lakeland, FL
3.4 GPA | Graduated, May 2020

ACCOMPLISHMENTS

- Fulbright Canada 2018-2019 Killam American Scholar.
- Won the best use of Google Cloud Platform at a Major League Hacking hackathon event.