

CAITLYN CAGGIA

www.caitlyncaggia.com | [linkedin.com/in/caitlyn-caggia](https://www.linkedin.com/in/caitlyn-caggia) | github.com/caitlyncaggia | Atlanta, GA | US Citizen

EDUCATION

Georgia Institute of Technology, Atlanta, Georgia

M.S. in Electrical and Computer Engineering, Concentration in Electromagnetics

Class of 2019

B.S. in Electrical Engineering, BS/MS Accelerated Program, Highest Honors

Class of 2018

California Institute of Technology, Pasadena, California

Certificate in Model Based Systems Engineering

March 2020

WORK EXPERIENCE

Northrop Grumman Corporation

May 2017 – present

Civil and Health Business Unit, Defense Systems, Atlanta, Georgia

June 2020 – present

Solutions Architect, Future Technical Leaders rotational program

- Architect technical solutions for secure cloud-based AI/ML capture and proposals in civil and health domains
- Lead developer for automated sector-level financial forecasting dashboards using Python, Alteryx, and Power BI
- Present analytics solutions and AI capabilities to customers in 2+ live demonstrations and rare oral RFIs
- Co-author white papers on cyber analytics, event-based architecture, and fraud, waste, and abuse strategy

H-1 Lead Technology Integrator, Mission Systems, San Diego, California

July 2019 – June 2020

Model Based Systems Engineer (MBSE), Future Technical Leaders rotational program

- Led behavior modeling efforts for navigation, communications, and electronic warfare systems for H-1 helicopters
- Created and updated 50+ diagrams, drawings, and models in Cameo for the Link-16 Rapid Integration design
- Designed an audio/video cable and an RF cable using SolidWorks that will be flown on all 350+ upgraded aircraft
- Earned formal customer recognition for leadership in authoring 4+ MBSE style guides for Agile hardware design

Communications Systems, Mission Systems, San Diego, California

May 2018 – July 2019

Systems Engineering Intern

- Simulated, analyzed, and validated scenarios and environments for multifunction RF systems in MATLAB
- Conducted trade studies for radios and waveforms using automated data collection and genetic algorithms
- Established consistent modeling practices between independent radar and communications modeling teams

Model Based Capability Engineering, Mission Systems, Baltimore, Maryland

May 2017 – May 2018

Systems Engineering Intern

- Generated 20+ analytical and descriptive radar models in MATLAB, Python, Rhapsody, and ModelCenter
- Evaluated timing and kinematics fidelity for mission-level analysis in AFSIM, a C++ simulation framework

RESEARCH AND TEACHING

Georgia Institute of Technology

School of Electrical and Computer Engineering, Atlanta, Georgia

August 2018 – May 2019

Graduate Teaching Assistant, Undergraduate Professional Communications Program

- Taught engineers efficient and effective technical communication skills in both academic and professional settings
- Advised 50+ students on technical reports, resume content, and interview techniques in one-on-one consultations
- Reviewed 150+ project proposals, research papers, and oral presentations to prepare students for senior design

Daniel Guggenheim School of Aerospace Engineering, Atlanta, Georgia

October 2017 – May 2018

Senior Design Team Lead, Space Systems Design Lab, RECONnaissance of Space Objects (RECONSO)

- Designed a cubesat to characterize and track space debris from 1 - 10 cm in diameter in low-earth orbit
- Rebuilt the flight software state machine to downlink images from the satellite to the ground station
- Managed a team of four students as a primary point of contact for faculty advisers and US Air Force sponsors

SKILLS

Programming: MATLAB, Python, C/C++, VHDL | Windows, macOS, Linux (Ubuntu, CLI)

Modeling Software: Cameo, Rhapsody, ModelCenter, SolidWorks, PowerBI, Tableau, Alteryx, AFSIM, AutoCAD

Areas of Expertise: Model based systems engineering, electromagnetics, antenna design, technical writing, analytics