

Jonathan M. Martinez

jmmartinez331@gmail.com | (646) 702-4703 | [My Profile Website](#) | [LinkedIn](#) | [GitHub](#) | New York (willing to relocate)

Detailed oriented Systems Engineer with analytical and problem-solving skills seeking opportunity to provide viable solutions by leveraging educational knowledge and technical experience.

SKILLS

Knowledge: JavaScript, Node.js, React.js, CSS, HTML, Git, AWS
Familiar: Java, Python, SQL / NoSQL database, Containers, NPM
IDE: Visual Studio Code, IntelliJ, Eclipse
Operating Systems: Windows, Linux

Applications: Microsoft Office, MATLAB
Protocol: TCP/IP, HTTP, LonWorks
Drawing: Autodesk Auto-CAD, Inventor
Languages: English, Spanish

CERTIFICATIONS

Amazon Web Services - AWS Certified Developer Associate, Verification# TK2F40KD1FB1Q7CT
Amazon Web Services - AWS Certified Cloud Practitioner, Verification# 0CZY6HN1H2EQ1F54
CompTIA Certified Security+ CE, Verification# 2SPQMYXHSDVQQ4WK
Fundamental of Engineering Certificate, NCEES FE

EDUCATION

Bachelor of Engineering in Electrical Engineering (BE), The City College of New York **3.8 GPA**

SIDE SOFTWARE PROJECTS

Moments Web Application

- Developed a web application using Node.js as backend server for API process and React.js client as frontend.
- The app functions as an album to archives images and notes from those precious moments in life.
- Employed MongoDB non-relational database to save and retrieve data. Deployed using Heroku and Netlify.
- Implemented Redux to manage the state of data and added Google Auth and JWT for user authentication.
- Link: <https://moments-portfolio.netlify.app/>

Project Management Tool

- Developed a full stack application using Java for the backend process, and React.js on the front-end.
- Utilized Tomcat server and Maven dependencies tools to build and run the java backend.
- Implemented MySQL relational database and JWT authentication credentials to isolate projects for each user.
- Knowledge to create and consume RESTful application programming interface (API).
- Link: <https://mgm-tool.herokuapp.com/>

Java-Database

- Integrated Java and SQLite relational database using JDBC to query music data content.
- Implemented Java Prepare Statement as a form of preventive security for SQL injection attacks.
- Knowledge of software engineering fundamentals for data structures, algorithms, and design pattern.
- GitHub link: <https://github.com/jmartin-code/Java-Database>

EXPERIENCE

- | 2016 - Present | Systems Engineer, MTA Long Island Railroad | New York |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------|
| <ul style="list-style-type: none">• Support the software development life cycle for rolling stock systems, from concept to deployment.• Develop and modify codes and scripts to maintain and automate tasks for microprocessor-based systems.• Review of IEEE 1558-2004 software specification proposals to provide recommendations for code improvement and compliance.• Knowledge of Object-Oriented programming (OOP), relational and non-relational databases.• Collaborate with suppliers, engineers and consultants for integration, modifications, and deployment of systems.• Support the design, development and upgrades of the Wayside Maintenance and Diagnostic Software (WMDS), which monitors railcar health and alert maintenance forces on possible troubleshooting and maintenance issues.• Write technical documents such as functional, installation instruction, modification, technical statement of work and operating procedures.• Research new technology and create proposals to incorporate modern solution systems in place of legacy or obsolete technology. | | |

Jonathan M. Martinez

jmmartinez331@gmail.com | (646) 702-4703 | [My Profile Website](#) | [LinkedIn](#) | [GitHub](#) | New York (willing to relocate)

2016 – 2018

Jr. Engineer, MTA Long Island Railroad

New York

- Troubleshooted system malfunction and developed testing process to determine root cause of defect.
- Developed and modified codes for programmable logic controller (PLC) to automate electrical system operations.
- Reviewed project correspondences such as drawings, technical proposals, test procedures, technical statements of work and material specifications for compliance with design guidelines, accuracy, and completeness.
- Functioned as Project Engineer to direct and manage installation of new components or technology systems.

2015 - 2016

Engineering - Quality Assurance, Con Edison

New York

- Maintained databases to track company work subject to compliance with NY State and Federal regulations.
- Prepared datasheets to analyze audit findings and calculated their monetary penalties for prioritization.
- Configured databases to organize QA documentations in support of control management and standards.
- Supported Project Specialists examining audit reports, work documentation and equipment to verify internal compliance with company requirements and applicable NY State rules.

2014 – 2015

Research Engineer, Integrated Photonics Lab.

New York

- Designed and built an experimental line-focused ultrasound transducer for new 3D imaging approach.
- Tested and configured electro-mechanical setup complemented with LabVIEW software to capture multiple 2D optical images.
- Published article “Optical Ultrasound Imaging Using a Lined-Scanned Transducer” on the Microwave and Optical Technology letter. Vol. 59, 770-773 in collaboration with mentor and peers.