

# Jonathan M. Martinez

[Immartinez331@gmail.com](mailto:Immartinez331@gmail.com) | (646) 702-4703 | [My Profile Website](#) | [LinkedIn](#) | [GitHub](#) | New York

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, Jupyter  
**Operating Systems:** Windows, Linux

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

## CERTIFICATIONS

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

## EXPERIENCE

- |   |  |                 |
|---|--|-----------------|
| <b>2016 - Present</b>   | <b>Systems Engineer, MTA Long Island Railroad</b>          | <b>New York</b> |
| <ul style="list-style-type: none"><li>• Support the software development life cycle for rolling stock systems, from concept to deployment.</li><li>• Develop and modify codes and scripts to maintain and automate tasks for microprocessor-based systems.</li><li>• Review of IEEE 1558-2004 software specification proposals to provide recommendations for code improvement and compliance.</li><li>• Knowledge of Object-Oriented programming (OOP), relational and non-relational databases.</li><li>• Collaborate with suppliers, engineers and consultants for integration, modifications, and rollout of systems.</li><li>• 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.</li><li>• Write technical documents such as functional, installation instruction, modification, technical statement of work and operating procedures.</li><li>• Research new technology and create proposals to incorporate modern solution systems in place of legacy or obsolete technology.</li></ul> |  |                 |
| <b>2016 - 2018</b>  | <b>Jr. Engineer, MTA Long Island Railroad</b>              | <b>New York</b> |
| <ul style="list-style-type: none"><li>• Developed and modified codes for programmable logic controller (PLC) to automate electrical system operations.</li><li>• Functioned as Project Engineer to direct and manage installation of new components or technology systems.</li><li>• 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.</li><li>• Troubleshooted system malfunction to determine root cause of defect or technical issue.</li></ul>  |  |                 |
| <b>2015 - 2016</b>  | <b>Engineering - Quality Assurance, Con Edison</b>         | <b>New York</b> |
| <ul style="list-style-type: none"><li>• Maintained databases to track company work subject to compliance with NY State and Federal regulations.</li><li>• Prepared datasheets to analyze audit findings and calculated their monetary penalties for prioritization.</li><li>• Configured databases to organize QA documentations in support of control management and standards.</li><li>• Supported Project Specialists examining audit reports, work documentation and equipment to verify internal compliance with company requirements and applicable NY State rules.</li></ul>   |  |                 |
| <b>2014 - 2015</b>  | <b>Research Engineer, Integrated Photonics Lab.</b>        | <b>New York</b> |
| <ul style="list-style-type: none"><li>• Designed and built an experimental line-focused ultrasound transducer for new 3D imaging approach.</li><li>• Tested and configured electro-mechanical setup complemented with LabVIEW software to capture multiple 2D optical images.</li><li>• 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</li></ul>   |  |                 |
| <b>2011 - 2014</b>  | <b>Paraprofessional, NYC Department of Education (DOE)</b> | <b>New York</b> |
| <ul style="list-style-type: none"><li>• Prepared and setup visual aids, computers, and associated equipment for daily class lessons.</li><li>• Instructed advanced Math and developed activities for lesson programs.</li></ul>   |  |                 |

# Jonathan M. Martinez

[Jmmartinez331@gmail.com](mailto:Jmmartinez331@gmail.com) | (646) 702-4703 | [My Profile Website](#) | [LinkedIn](#) | [GitHub](#) | New York

---

## EDUCATION

---

<b>Bachelor of Engineering in Electrical Engineering (BE),</b> The City College of New York	<b>3.8 GPA</b>
---	----------------

---

## SOFTWARE PORFOLIO

---

### Moments-Portfolio Application

- Developed a web application using Node.js 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.
- Link: <https://moments-portfolio.netlify.app/>

### Project Management Tool

- Developed a full stack application using Java for the back-end process, and React.js on the front-end.
- Utilized MySQL relational database and Security signing credentials to isolate projects for respective users.
- 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>