

# Charles Ata

## profile

I'm a Software Developer with a background as an Electrical Engineer within the nuclear, automotive, and utility industries. My venture into software engineering began with a spark of curiosity into emerging technologies. Motivated by my passion for self-improvement, and building great things, I was inspired to learn more about the capabilities and advancements of software development to strategically and creatively solve problems.

## experience

### Teaching Assistant - Software Engineering [🔗](#)

General Assembly  
Oct 2021 - Present

- Support students by performing code reviews, debugging, and answering questions to meet learning objectives.
- Organize and facilitate weekly sessions for students - reviewing topics and general Q & A.
- Demonstrate fundamental understanding of material by grading assessments, and deliverables.

### Electrical Design Engineer

Tetra Tech  
Jan 2020 - Jan 2021

- Led large-scale designs of cable tray and class III power tie-ins for a Molybdenum-99 Isotope Transfer Delivery System [🔗](#) in collaboration with Tetra Tech, OPG, and BWXT.
- Prepared technical calculations, design drawings, engineering change documents, and bill of materials for multiple projects.
- Interacted with clients to assess deliverables, provide high quality designs, and maintain positive relations.
- Performed cross-disciplinary reviews and coordinated interdepartmental cohesion throughout the design processes.

### Project Engineer

Honda of Canada Mfg.  
Sept 2017 - Dec 2018






- Successfully secured authorization for multi-million building expansion [🔗](#) by conducting thorough risk assessment and mitigation planning.
- Responsible for project management, equipment efficiency initiatives, coordinating across multiple departments to meet timelines, budgets, and success indicators.
- Identified new priorities and projects through consultations, technical reports, engineering calculations, and cost benefit analysis.

### Reliability Engineer Intern

Alectra Utilities  
Aug 2015 - Aug 2016

- Developed requirements and plans for data collection to ensure data integrity and affirm project effectiveness.
- Proposed system upgrades by gathering, analyzing, and interpreting data for 3000+ distribution assets through ArcGIS, Crystal Reports, and Excel.
- Improved project prioritization budgets for 2017-2026 through re-allocation of \$1M annual budgets.

## contact

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## education

### Software Engineering Certificate

General Assembly  
2021 [🔗](#)

### Professional Certificate in Computer Science for Artificial Intelligence

Harvard University (HarvardX - edX Inc.)  
2021 [🔗](#)

### Google IT Automation with Python Professional Certificate

Google (Coursera Inc.)  
2021 [🔗](#)

### Bachelor's of Engineering (Honours) Electrical Engineering

University of Ontario Institute of Technology  
2017

## proficiencies

- **Programming** - JavaScript, React.js, HTML, CSS, Bootstrap, Materialize, Express, Node.js, MongoDB, Mongoose, Python, Django, MySQL, PostgreSQL, Git, GitHub, Heroku, Trello, Postman, AWS S3
- Comfortable in Linux (Ubuntu) & Windows
- Knowledgeable in Project Management, Computer Architecture, Software Troubleshooting & Debugging Techniques, Testing Concepts, Agile & Waterfall Development Methodology
- **Bilingual** - excellent verbal & written communication skills in English and French

# Charles Ata

## projects

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### Paway [🔗](#)

- While on a team of 5 as part of a “Collab-athon” with 3 UI/UX designs and 2 Developers, created a MERN-Stack web application for lost and found pets.
- Allowed account-less users to search and filter through pet postings, users that sign-up for an account are able to report a missing or found pet.
- Utilizing Imgur API for image uploading, Google Maps APIs for dynamic mapping and geocoding, React Share API for Facebook, WhatsApp, Twitter posts, and Nodemailer JS for email notifications.
- API testing of JSON responses took place through Postman.

- MongoDB • React
- Express • Javascript
- Node.js • HTML
- CSS • MaterialUI
- Bootstrap • AJAX
- Postman

### Workoutify [🔗](#)

- Collaborated within a team of 2 to create a Full-Stack Django workout scheduling application.
- Allowed users to CRUD exercises and workouts to track workout dates.
- Incorporated OpenWeatherAPI for location based daily weather.
- Implemented AJAX for dynamic, asynchronous rendering to provide a SPA feel.

- PostgreSQL • HTML
- CSS • Materialize
- JavaScript • Python
- Django • AJAX

### NeedSomeSpace [🔗](#)

- Created a space-themed RESTful MEN-stack CRUD Application.
- Leveraged OAuth API for Gmail login, Imgur API for image uploading, & NASA API for NASA's APOD.
- Utilized Trello for tracking user stories, ice box items, and MVP progress.
- Wireframed and planned the UI design of the application, as well as ERDs for NoSQL Schema layouts.

- MongoDB • HTML
- CSS / SASS • Materialize
- JavaScript • Node.js
- Express

### Blackjack [🔗](#)

- Created a browser-based card game using Javascript, CSS, HTML, providing visuals to the game and sound effects to create an interactive experience.
- Developed through functional programming and test-driven development processes.
- Wireframed and planned UI design of the application.
- Utilized Git control during the production of the application with frequent commits until deployment.

- HTML • CSS
- JavaScript

### Raspberry Pi Smart Home Controller

- Developed a Smart Home Controller using Python, Raspberry Pi, linear & non-linear loads as a final capstone project for my B.Eng.
- Collaborated within a team of 4 to implement a test controller capable of handling 8 loads including a solar-powered capacitor bank.
- Created technical reports, implemented Python coding, unit testing, Simulink simulations, circuit testing and encasement design.

- Python • MATLAB
- Simulink