

Alvin Z. Cox IV

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Full Stack Web Developer with a background in physics and mathematics. Experience with automation systems and logic based systems. Excellent interpersonal communication skills and collaborator who works well on team-based projects as well as independently. Recognized for proven complex problem solving abilities to contribute effectively as a part of a fast-paced, quality-driven team.

Relevant Experience

Procasti-dater: An App that finds local restaurants and events / activities to quickly set up a date.

- **Role:** Use jQuery AJAX method to make server side requests for restaurants and events and append the results to a map that shows the user's current location or a location of the user's choice. Created using HTML and styled with CSS. Integrated Google Geocode, Google Maps, Google Maps Places, & Ticketmaster API's and manipulated the DOM with JavaScript by leveraging the DOM API
- **Utilized:** HTML5, CSS, JavaScript, jQuery, HTTP GET Requests, & Server-side API's

Violin Central: Application for violin instructors to create lesson plans to teach to their students

- **Role:** Query MySQL database for instructional exercises from popular violin instructional textbooks Exercises can be searched by various criteria such as position, bowing, or key. Select and save any number of exercises into a lesson plan that for use in teaching. Search saved lesson plans and view each exercise that a lesson plan contains. Created using MySQL database along with Sequelize and Sequelize Fixtures. Handlebars is used to help render the HTML.

Utilized: HTML5, CSS, JavaScript, jQuery, MySQL, Sequelize, Sequelize Fixtures, Express, Handlebars

Weather-Dashboard: Application that returns current and forecasted weather for a specific city.

- **Role:** Use jQuery AJAX method to make server side requests for current and future weather and appends the results to the HTML. Created using HTML and styled with CSS. Integrated Openweathermap API and manipulated the DOM with JavaScript by leveraging the DOM API
- **Utilized:** HTML5, CSS, JavaScript, jQuery, HTTP GET Requests, & Server-side API's

Work-Day Scheduler: An application for scheduling events on each hour during the work day.

- **Role:** Use jQuery to create a dynamically updated work day schedule that breaks the work day down by hour and store user created events. Created using HTML and styled with CSS. Makes use of Moment.js to dynamically update the appearance of the calendar and show the current time and date. Local Storage is utilized to retain data entered by the user
- **Utilized:** HTML5, CSS, JavaScript, jQuery, Local Storage, & Moment.js

Technical Skills

Full Stack Web Development

- *Programing Languages:* HTML5, CSS3, JavaScript, jQuery, Node.js, ES6, Express, MySQL, MongoDB, Handlebars
- *Restful API's:* JSON, API's, AJAX
- *Developer Tools:* Bootstrap, Terminal, GIT, GitHub, Heroku

Automation Systems / Communication Networks

- Emerson DeltaV DCS Automation Systems: M-Series
- Allen Bradley PLC Automation Systems: PLC-5, SLC-500
- Profibus
- Foundation Fieldbus
- DeviceNet

Computer Programs

- Microsoft Office (Word, Excel, Access, PowerPoint)
- Auto-CAD
- Autodesk Inventor
- DeltaV Operate
- DeltaV Explorer
- DeltaV Diagnostics

Education

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| <i>Full Stack Web Development Certificate</i> (University of Richmond, Richmond, VA) | November 2020 |
| <ul style="list-style-type: none">• A 24-week program focused on technical programing and market-based skills | |
| <i>Associate of Applied Science</i> (John Tyler Community College, Chester, VA) | May 2011 |
| <ul style="list-style-type: none">• Mechanical Engineering Technology• Honors: Graduated Summa Cum Laude, Dean's List | |
| <i>Bachelor of Science</i> (Randolph-Macon College, Ashland, VA) | June 2007 |
| <ul style="list-style-type: none">• Major: Physics• Minors: Astrophysics, Mathematics | |

Work Experience

Validation Engineer, Gavin Pharmaceutical Services - Dodge City, IA (Petersburg, VA) July 2018 - Present

- Validate automation systems at an A.P.I. manufacturing facility, ensuring GMP requirements are met
- Reverse engineer automation/electrical systems in order to properly understand functionality for validation purposes
- Preform field reviews on automation/electrical hardware to ensure proper installation
- Field review software components of automation systems to ensure proper installation, version control, security parameters, and functionality
- Conduct operational tests on various aspects of automation systems to ensure proper functionality
- Properly document results of tests and field reviews following Good Documentation Practices
- Field verify and redline drawings
- Update, correct, and create new drawings using AutoCAD software
- Properly maintain controlled documents
- Manage personnel performing various tasks such as field review, creating/maintaining documents, conducting operational testing

Terminal Operator, First Energy Corporation - Richmond, VA July 2013 – July 2018

- Maintenance Engineering; inspect pipes, tanks, and equipment and perform maintenance when necessary
- Project Management; Coordinate and work with various contractors on multiple projects on site
- Manage inventory; perform line change to ensure incoming product is placed into correct tank
- Take water and product samples and ensure government and E.P.A. regulations are followed
- Train new drivers on equipment and ensure safety regulations are being followed

Parts Delivery, Crossroads: Chrysler Jeep Dodge - Prince George, VA September 2011 – July 2013

- Deliver parts to auto and body shops
- Organize and maintain warehouse
- Interact with customers