

PERSONAL PROFILE

Inquisitive software engineer with a background in chemical and environmental engineering. Past experience in automation engineering provided inspiration to pursue a Professional Certificate in Full Stack Development. Experience leading research laboratories and interdepartmental project teams awarded leadership, time management, conflict resolution, and collaborative skills. Member of Tau Beta Pi. Currently looking for a return to software programming and design systems.

CORE SKILLS

- HTML, CSS, JS, Bootstrap, TailwindCSS, JQuery, JSON, AJAX
- APIs, Node, ES6, Express, Jest, Handlebars, MySQL, Sequelize, NoSQL, Apollo, Stripe, React
- MERN Stack, Heroku, AWS, Agile Development, CI/CD pipelines, Test Driven Development
- MATLAB, Excel VBA, Python, ChemCAD, LabVIEW, C++
- The DOM, OOP, MVC Paradigm, Progressive Web Apps
- Proficient in debugging
- Trained in quality assurance and conflict resolution
- Cross platform project development
- Experienced pair programmer
- Multitasker and critical thinker
- Creative and scientific writing
- Dependable, self-motivated, and attentive to detail

PROJECTS

ArtMart | <https://github.com/abbeydoyle/artmart.git> | <https://devartmart.herokuapp.com/>

Summary: A full-stack application using the MERN stack to create an art print e-commerce app allowing a user to create an account, add prints to their cart, and purchase them. The user can also log back in at a later date to find unpurchased items still in their cart.

Technologies: Node, Express, React, GraphQL, Apollo, MongoDB, Mongoose ODM, TailwindCSS, bcrypt, dotenv, Cloudinary, Stripe

A Day in the Leaf | <https://github.com/abbeydoyle/A-Day-in-the-Leaf> | <https://a-day-in-the-leaf.herokuapp.com/>

Summary: A full-stack application using RESTful APIs to implement a plant care app allowing a user to track the automated watering schedule, light exposure, and other health concerns of multiple plants. This data is saved within their profile and available to them upon a later login.

Technologies: Node, Express, Handlebars, MySQL, Sequelize, CronJob, Chalk, JS, TailwindCSS, Session-express, bcrypt, dotenv

Movie Moodboard | <https://github.com/abbeydoyle/movie-moodboard> | <https://abbeydoyle.github.io/movie-moodboard/>

Summary: A responsive front-end application to create movie and tv show recommendations based on user input.

Technologies: HTML, CSS, JS, TailwindCSS, third-party APIs

RECENT WORK EXPERIENCE

Boeing, Environmental Engineering (*February 2022 – Present*)

- Act as project manager for the creation and implementation of a full stack application to automate the current hard copy preventative maintenance process
- Internally audit chain of custody practices
- Create queries within Access databases to profile hazardous waste designations to ensure safe practices and regulatory compliance
- Routinely create required permit reports to the appropriate agency for environmental, health, and safety standards
- Act as the point of contact for agency interactions with organizations such as EPA, Department of Ecology, Department of Transportation, and local and federal government organizations

The Center for Disease Control and Prevention, Battelle Contractor, Emergency Response Branch (*July 2019 – February 2022*)

- Created a liquid handling automation program for COVID-19 response sample aliquots
- Accepted and prepared all specimen for analysis in the multi-branch nationwide 2019 Lung Injury Response
- Completed proficiency testing programs, emergency responses, and sample logistic exercises
- Managed inventory, material handling, and branch shipments
- Aided research deadlines by meeting data analysis goals by providing efficient, timely, and accurate support via laboratory and sample preparation services
- Received passing CLIA (Clinical Laboratory Improvement Amendments) lab accreditation required to test human specimens for health assessment or to diagnose, prevent, or treat disease
- Refactor outdated software methods for sample processing
- Created automation programs for Hamilton pipetting devices to decrease processing time for emergency preparedness protocols

EDUCATION

University of Washington

September 2022 - March 2023

Grade: 100.76

Professional Certificate

Full Stack Web Development

Progressive Web Application Development

University of Tennessee at Chattanooga

August 2015 – May 2019

177 earned hours, GPA: 3.763

Magna Cum Laude

Brock Scholars Program – Honors College

Major: Chemical Engineering – Minor: Biology

Dobyns-Bennett High School

August 2011 – May 2015

GPA: 3.758

Magna Cum Laude

AP courses in Calculus, Biology, US and European History, Spanish, English Language and Literature, and Psychology

WORKPLACE AWARDS

Boeing

- Presented an award for work on a nationwide Boeing policy project
- “Abbey has been a great addition to the team and is spoken of very highly by them members. I appreciate her honest communication and the fact that she is willing to take on a variety of different tasks. Abbey has a consistently positive and upbeat attitude and is very technically competent. Other members of the team have noted she is a fast learning, is diligent, and has good attention to detail.” – 2022 Performance Review

The Center for Disease Control and Prevention

- Granted current DoD Top Secret Security Clearance
- Presented 2 awards for the work on the 2019 Lung Injury Response
- Cited on the 2019 Lung Injury Response CDC Publication
- “She was an invaluable asset to the lab during the lung injury response earlier this year and it’s worth noting, she nearly handled the response singlehandedly for the IRL (Incidents Response Lab). She has been a source of continuity in the lab this year as many staff have transitioned out of the lab. She has worked diligently in the IRL, taken on more tasks and helped maintain continuity during staff transitions. She communicates well and is responsive to both Battelle and CDC requirements.” – 2020 Performance Review

UNIVERSITY HONORS, AWARDS and ACTIVITIES

Tau Beta Pi, The University of Tennessee at Chattanooga

Spring 2018 – Present

- Requires members to be in the top 1/8 of the engineering class

Departmental Honors Thesis, The University of Tennessee at Chattanooga

Spring 2019

- “Influence of environmental conditions on fatty acid-induced changes in *Vibrio cholerae* persistence and pathogenicity”
- Defended and Passed April 2019
- Presented research at conferences in Washington D.C., Boston, and Chattanooga

UTC Symphony

November 2017 – May 2019

- Auditioned and placed as first violin

Dean’s List, The University of Tennessee at Chattanooga

August 2015 – May 2019

- Requires being in the top 10% of Major

Chemical Engineering Mentor

August 2016 – May 2019

- Oversee underclassman chemical engineering majors
- Advise on class scheduling and course loads

Placed in the William E. Brock Scholar’s Program, The University of Tennessee at Chattanooga

August 2015 – May 2019

- 1 of 50 students allowed into the four-year interdisciplinary, liberal arts program

COMMUNITY SERVICE

The Trevor Project, remote

- Maintain weekly shifts as a Crisis Counselor for at risk youth through TrevorCall and TrevorChat
- Completion of a 12-week training program
- Trained in crisis resolution to deescalate high risk situations resulting in Contact’s current and future safety

Andrew Johnson Elementary School, Kingsport, TN

- Carried out afternoon lessons to the kindergarten children behind in reading and spelling skills in the summer
- Worked in group and individual settings to teach students phonics, pronunciations, and reading skills with games, activity sheets, and small books

English, (Native)

Spanish, Upper Intermediate Proficiency (7 years)

American Sign Language, Lower Proficiency (6 months)