Kathleen Pehl

Email: kathleen.pehl@gmail.com • **Tel:** 425-953-6252 • **Location:** Fleming Island, Florida, 32003 USA
LinkedIn: https://www.linkedin.com/in/kathleen-pehl-77bb1710/ • **GitHub:** https://github.com/kpehl
Portfolio: https://www.kathleen-pehl.net/

Full stack web developer with a background in systems engineering working for both commercial and governmental entities. Earned a certificate in full stack web development from the University of Central Florida. Award winning engineer with demonstrated leadership skills. Extensive experience across the engineering life cycle: requirements definition, computer aided design, stress analysis, computational fluid dynamics, and acoustic analysis, systems integration, writing and executing test plans, analyzing test data, documenting results. Collaborated successfully with cross-functional teams and suppliers to troubleshoot in-service issues. Recognized for seeking out process improvements, cost savings and exceeding expectations.

PERSONAL CODING PROJECTS

REACT RETREAT | GITHUB: http://bit.ly/3p19URp | **APPLICATION:** http://bit.ly/3a0FSZL
- A website for a fictional hotel built with React, allowing visitors to create an account, view available rooms, make room reservations, and view previously made reservations. Administrators can log in and view all registered guests and all bookings.
- Application created as part of a four-person team.
- JavaScript, React, Redux, Node.js, Express.js, MongoDB/Mongoose, JWT, HTML, CSS

WEEK IN VIEW | GITHUB: https://bit.ly/3nKjjNf | **APPLICATION:** https://bit.ly/3lN9Io3
- An application that allows a user to plan out their week and beyond with a calendar, task list, and local weather. Users create an account, log in, and see their personal homepage with their saved events and tasks.
- Application created as part of a three-person team.
- JavaScript, JQuery, Node.js, Express.js, MySQL, Sequelize, passport, HTML, CSS

COOK SOMETHING GOOD | GITHUB: https://bit.ly/3diwK2F | **APPLICATION:** https://bit.ly/36TgcNw
- An application that helps users with weekly menu planning and cooking by allowing a user to search for recipes, save chosen recipes to a list, and populate a shopping list. A map shows nearby grocery stores.
- Application created as part of a three-person team.
- JavaScript, JQuery, Node.js, Express.js, HTML, CSS, Bulma, server-side and client-side APIs

TECHNICAL SKILLS

Web Development: HTML, CSS, Bootstrap/Bulma/Foundation, Handlebars, JavaScript (ES5 and ES6), axios, php, Laravel, jQuery, Node.js, Express.js, MySQL / Sequelize, MongoDB / Mongoose, React, Redux, Vue. Passport, JWT, Python, AWS

Other programming skills: PYTHON, MATLAB, Visual Basic, FORTRAN, PERL, C++

Computer Aided Design and Analysis: CATIA, ANSYS

Technical Writing: Requirements documents, test documents, coordination memorandums, standard operating procedures, change management documents.

PROFESSIONAL EXPERIENCE

➢ **Web Developer, American Web Devs, Pittsburg, PA (remote), current position**
   Full Stack Web Developer, June 2021 – present
   - Front- and back-end coding for multiple projects serving various commercial and government clients
     - Vue, Laravel, MySQL, PHP
   - Requirements definition and refinement
   - Code review, quality assurance, and testing

➢ **Engineer, Boeing Company, Everett, WA, 2008-2017**
   777X Fuel Equipment Design Engineer, January 2015 – March 2017
   - Managed 3 work statements with two suppliers, coordinated design and qualification efforts, resulting in parts being delivered in a fully qualified and certified state in accordance with the project schedule.
   Wide Body Aircraft Fuel System Design Engineer, November 2012 – January 2015
   - Led cross-Atlantic team of engineers in the urgent redesign, qualification, certification, and production of a part, with no impacts to production lines.

- Led team value stream improvement initiatives in engineering, manufacturing, and in-service issues resulting in cost savings of $23,000,000.

787 Fuel System Design Engineer, January 2010 – November 2012
- Led design team for fuel tank sensors, coordinating work packages with Fuji Heavy Industries and Mitsubishi Heavy Industries in Japan.

787 Composite Structural Design Engineer, March 2008 – January 2010
- Performed composite layup modeling and analysis for panels and stringers. Validated models with test data.

➤ **Engineer, Space and Naval Warfare Systems Center, San Diego, CA**
Acoustic and Structural Engineer
- Worked on an active sonar system carried onboard an unmanned surface vehicle. Performed structural modeling and analysis of transducers and modeled acoustic performance of a single transducer and the array behavior. Participated in testing of transducer arrays. Aided in systems engineering and integration of the sonar array onto the vehicle.

➤ **Engineer, Naval Air Warfare Center, Weapons Division, China Lake, CA**
Structural Engineer
- Performed structural modeling and analysis on several aircraft and missile platforms.
- Performed materials investigations, including failure analysis and testing, crack propagation analysis, coupon testing, and scanning electron microscopy.
- Performed atmospheric testing and research. Created real-time atmospheric models to support project testing.

EDUCATION

➢ Full Stack Web Development Certificate. University of Central Florida. February 2021.
➢ Bachelor of Science and Master of Science, Aerospace Engineering with Certificate in Atmospheric and Oceanic Science, University of Colorado at Boulder, Boulder, CO