Mark W. Taylor

Colton, Oregon | 541-993-9777 | mwtaylor993@gmail.com | www.linkedin.com/in/mark-taylor-engineering

Results-driven Aeronautics and Mechanical Engineer with diverse skills in software programming, system debugging, and technical troubleshooting. Analytical thinker and resourceful strategy leader with 10+ years of well-rounded experience meeting goals and providing solutions to complex technical issues. Eager to leverage coding knowledge to meet the future demands of AI and Machine Learning in a fullstack software engineering position.

Professional Experience

Gladstone High School | Gladstone, Oregon
PLP Teacher | March 2022 – July 2022
- Increased productivity by 32%, implementing Kanban board processes for faster evaluation and response to students 'work
- Optimized educational processes to double availability and uptime of distance learning student services
- Discovered inconsistencies in educational materials by performing daily debugging of PLP platform
- Troubleshot Chromebook issues for 80+ students daily to ensure success was not hindered by technological errors

Independent Contractor | Aurora, Oregon
Airplane Mechanic | July 2018 – February 2022
- Updated aging aircraft with new features based around G5 intermediate glass cockpit, enabling pilot to avoid mechanical steam gauges and prevent injury
- Programmed new primary flight indicator systems, connecting to communication and navigation sources to expedite notifications
- Selected and constructed 100+ structural components to lift aircraft, remove landing gear and wings for inspection, repair, and replacement
- Engineered 200+ pieces for aircraft while referencing maintenance manuals and original engineer schematics to ensure design compatibility
- Reduced income loss 13% by instituting procedural changes to ensure timely spot checks to cycle aircraft inspections to prevent service downtime
- Collaborated with coworkers to complete projects and deliver top-notch customer service while adhering to federal safety and repair policies
- Performed timely repairs and replacements under extreme time constraints and pressure while ensuring safety of clientele

Molalla River School District | Molalla, Oregon
Substitute Teacher | November 2018 – June 2020
- Implemented educational plans to reinforce content and provide quality education to 100+ students daily while managing classroom activities
- Supervised technological security protocols to identify and resolve advanced persistent threats
- Achieved and scaled educational and behavioral goals with students ranging in all ages and skills, understanding, and emotional development

Oregon State Park Ranger | The Dalles, Oregon
Park Ranger 2 / Park Ranger 3 | August 2014 – July 2018
- Reduced injury and exposure to dangerous wildlife 33% by designing and engineering new hydraulic systems
- Diagnosed and implemented mechanical repair processes for heavy equipment within a narrow window of safety and allowable downtime to minimize service delays
- Increased longevity and functionality of solar-powered battery systems 38% by identifying failures in self-contained, moisture-based decomposition units and reverse-engineered solar power controllers
- Implemented rotational schedules to prevent staff burnout, resulting in 15% increase in employee and visitor satisfaction
- Increased engagement and reduced use conflicts by leading interagency cooperation between state, federal, native, and local landowners
- Engineered backhaul communication with cellular signal converters, Ubiquiti repeaters, and solar power with battery backup for each chain segment, resulting in communication along 24-mile dead zone

Core Competencies

Security Engineering, Computer System Security, Infrastructure Design, Software Testing, Root Cause Analysis, Aeronautics Engine Mechanics Instruction, AI, Applied Machine Learning, Mechanical Repair Processes, Technical Troubleshooting, Project Management, Interpersonal Communication, Complex Problem-solving, Critical Thinking

Technical Skills

Programming Languages: HTML, CSS, JavaScript, **Development and Testing:** API, JSON, Rest, AJAX (fetch API), Bootstrap, JavaScript/jQuery, PWA, React.js, Template Engines, User Authentication, HTTP Request Methods, GraphQL, Bulma, **Deployment and Delivery:** Heroku, Git, GitHub, Shell Scripting, Unit Testing, Linting, Continuous Integration, MERN stack (MongoDB, Express.js, React.js, Node.js), **Databases:** MySQL, MongoDB GitHub https://github.com/Z9tails/

Education & Training

Programming Bootcamp, University of California Berkeley
Bachelor of Science, Recreation and Natural Resource Management, Oregon State University
Pilot's License