Burkely Pettijohn *Software Engineer*

🔗 Portfolio   💼 LinkedIn   ⊙ GitHub   📞 5127719749   ✉ burkelypettijohn@gmail.com

An aspiring software engineer with a strong foundation in science and scientific methodology. I maintain a strong passion for self-growth and problem solving. Currently seeking a position in computer science to utilize my strengths and build new skills in a team with aligned goals.

Education

BS Computer Science
Oregon State University
2025 | Corvallis, OR
summa cum laude (GPA: 4.0/4.0)

MS Medical Science
Texas A&M University
2018 | College Station, TX
Focus: Structural Biology and Biochemistry

BS Marine Science
Texas A&M University
2014 | Galveston, TX
summa cum laude (GPA: 4.0/4.0)

Projects

CPU Emulator ⊡
- Managed CI and workflow with auto-testing.
- Implemented CPU instructions in C++.
- Demonstrates a clear understanding of lower lever programming and computer architecture.

eCommerce Website ⊡
- Built CRUD eCommerce site for small business.
- Follows the Agile workflow.
- Site functionality supported by microservices.

Undergraduate Oceanographic Thesis ⊡
- Completed research project that describes turbulence intensity with a novel approach.
- Used MATLAB for data analysis and modeling.
- Helped describe internal waves and nutrient transport mechanisms in a threatened bay.

Professional Experience

Teaching Assistant
Oregon State University
2023 – 2025 | Remote
Coordinated with faculty for Discrete Math course to assist students by hosting office hours, moderating class forums, and facilitating group projects. Responsible for grading classwork and exams.

Laboratory Technician
Marathon Petroleum
2019 – 2023 | Texas City, TX
Performed analytical testing to ensure quality control of refinery operations. Verified accuracy of instruments and troubleshoot issues. Data entry and instrument control carried out in LIMS sample manager, QC/Plus, and OpenLab.

Research Assistant
Texas A&M Health Science Center
2015 – 2019 | College Station, TX
Researched how proteins cross membranes. Developed experiments using techniques such as: plasmid prep, protein purification, labeling proteins with fluorescent probes, and fluorescence microscopy to observe biophysical experiments.

Skills

Python │ C/C++ │ JavaScript │
MATLAB │ SQL/NoSQL databases │
Node JS │ Python Flask │ Express

Interests

- Cycling
- Hockey
- Cooking with my wife