Kyle Schneider

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Software Developer

Full-stack software developer with strong foundations in scientific computing, combining expertise in JavaScript/TypeScript, React, Python, and C++ to deliver high-performance solutions. Experience architecting cloud applications using AWS services and working with both SQL and NoSQL databases. Focused on delivering maintainable, type-safe code while effectively communicating technical solutions to stakeholders.

Technical Skills

Frontend:	TypeScript	React	Redux	HTML	CSS
Backend:	Node.js	Python	C++	AWS Lambda	CloudFormation
Databases:	PostgreSQL	DynamoDB	RDS	SQL	NoSQL
Dev Tools	Git	VS Code	Linux	tmux	Postman
Data Analysis:	NumPy	SciPy	Pandas	Matplotlib	ChartJS

Projects

CLI Chess Application - GitHub
- Object-oriented design following separation of responsibility principles
- Multi-threaded architecture for game clock and multiple modes of user input
- Implemented comprehensive test suite using Google Test framework, achieving full coverage of game logic

Fluid Dynamics Simulation - GitHub
- Fluid dynamics simulation utilizing C++ parallelism and STL algorithms for large-scale computations
- Graphical visualization of fluid flow using Simple DirectMedia Layer (SDL2)
- Translated complex mathematical models from academic papers into efficient C++ implementations

Experience

Earthview, Denver, CO May 2023 – December 2024
Software Engineer

- Architected and developed full-stack features using AWS CloudFormation, Lambda, and RDS/DynamoDB, accelerating development time by owning end-to-end feature realization.
- Designed and built data visualization tools that increased hardware performance visibility, enabling detection of critical system issues, and facilitating communicating complex datasets to customers.
- Optimized computation-heavy simulations through C++ implementation, reducing runtime by over 95% and substantially reducing cloud-compute costs.
- Enhanced scientific computation code by implementing comprehensive testing, leading to fewer production environment runtime errors.

ChampionX, Boulder, CO January 2022 – September 2022
Data Analyst/Junior Flight Scientist

- Spearheaded revival of legacy drone technology project through comprehensive documentation and experimental validation, securing $500K in funding and 30% resource allocation from senior science officers.
- Improved experimental data analysis by implementing optimal algorithms for nonuniform time series processing and integration, resulting in significantly more accurate curve fitting and data visualization.
- Developed and deployed Python automation scripts using NumPy and Pandas for flight data analysis, including automated detection of aircraft maneuvers, reducing processing time from hours to minutes.
- Designed and implemented real-time data processing system for Above Ground Level measurements, creating an intuitive cockpit interface that enhanced flight safety and trajectory precision.

Education

Flatiron School, Remote January 2023 – April 2023
Full Stack Web Development, Python and JavaScript program

University of Colorado, Boulder, CO August 2017 – May 2021
Bachelor of Arts in Mathematics, magna cum laude
Bachelor of Arts in Physics