Gerald Todd II

Developer, teacher, mathematician

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EXPERIENCE

Einstein Medical — Remote — *Software Engineer II*

Aug 2022 - Present

Served as a primary resource for API development. Designed, developed, tested, and maintained code use open-source tools, software libraries in product and API development. Lead team for a new major release of in-house product-creation software. Created integration modules and abstract APIs to pass data to and from internal/external systems using multiple RESTful APIs. Wrote complete documentation of my work and research to help colleagues, improve the product, and improve the support experience.

AdaptiveStack — Remote — *Full-stack Developer*

Aug 2021 - July 2022

Developed in PHP on a federal contract for the Department of Veterans Affairs (VA). Used Agile methodologies to assist the VA in the vaccination effort for all US veterans. Built portals for veterans to submit proof of vaccination or exemption and workflow for supervisors to review and approve or kick back the report. Worked closely with many other government related entities to ensure the completeness and accuracy of such reports. Led a security audit for the VA of the application and received a 3-year Authority To Operate (ATO) renewal–the longest awarded in the 11-year history of the application.

iOSTheme.live — Portland, OR — *Founder/Developer*

Nov 2020 - June 2021

Built an online engine to generate and install custom themes and profiles for iOS devices. Originally created as a personal project, but high interest was expressed by the community. Built a custom PHP framework and developed a mobile installation method for themes on a LAMP (Linux, Apache, MySQL, PHP) stack. Formed an LLC and trained employees to assist in graphic design and development. Implemented SEO and deployed ad campaigns. Now open-sourced on my GitHub.

Scan123 — Portland, OR — *Full-stack Developer*

Jul 2019 - Jun 2020

Design, build, and maintain high performance, reusable, and reliable PHP code in a LEMP stack. Develop and follow Scrum methodologies. Translate

TECHNICAL EXPERIENCE

Full-stack web development
-Docker and Dockerization of applications
-Certified ScrumMaster
-Linux/nginx/MySQL/PHP stack
-Developing and deploying new features/updates to web app with ~400k views/week
-Document processing/OCR/ Cloud storage
-Version control/GIT

Operating Systems/Desktops
-Linux/MacOS/Windows
-Troubleshooting
-Server Setup/Maintenance
-Raspberry Pi/Raspbian
-GNOME/i3wm
-Hardware assembly

Big Data
-Analysis of large data sets
-Efficient performance for very large data sets
-Effective visualizations

LANGUAGES

PHP, HTML, SCSS, Javascript, ReactJS, Angular, SQL, Python, C/C++, Java, R, Visual Basic, LaTeX, MATLAB, Mathematica

CERTIFICATIONS

-Government Security Clearance
-Certified ScumMaster
-American Tutoring Association
-College Learning & Reading Association

designs and wireframes into high quality code. Assist with code and database optimization. Design, program and test software according to predetermined test plans. Unit test code for robustness, edge case scenarios and usability. Assist with UI optimization for the web. Collaborate with other team members in product design. Support release and post-release activities, such as support and maintenance. Continuously discover, evaluate and implement new technologies to maximize efficiency.

University of Montana — Missoula, MT — *Instructor*

Aug 2014 - June 2018

With 3-4 classes per week and approximately 80 students per semester, I taught classes in Probability and Linear Math, Applied Calculus, College Algebra, Calculus II, and Statistics. Develop software in Mathematica to assist in visualization of complex structures implemented on new technology. Responsibilities included weekly lectures, holding office hours, grading quizzes and exams, managing grade books, and programming applets used in class and at home. Average rating from 77 students on a scale from 0 to 5 was 4.1.

Tutor — California/Alaska/Montana/Online

June 2006 - Present

I have tutored mathematics for a total of six different departments at three different schools as well as online with a variety of platforms. Courses ranged from pre-algebra to advanced calculus, differential equations, discrete methods, etc. and standardized test prep. I hold certifications from the American Tutoring Association and the College Learning & Reading Association. I have steadily tutored privately for the past 16 years.

EDUCATION

University of Montana, Missoula — *Master's in Mathematics*

Fall 2014 - Spring 2018

Master's in Combinatorics & Optimization

Master's in Applied Mathematics & Analysis

University of Alaska, Anchorage — *B.S. In Mathematics*

Spring 2009 - Fall 2012

Graduated with honors and received the award for highest GPA among Math and Computer Science graduates.

Practical Big Data Analytics

Data dictionaries and data mappings, distributed computing, and related methods.

Numerical Analysis

Error analysis, approximation and interpolation, numerical optimization, numerical integration of ordinary and partial differential equations.

Teaching College Math

Publishing, grant writing, writing in mathematics classes, media use in mathematics, evaluation and assessment of curricular materials and programs, and instructional methods in university mathematics courses.