

Garrett Kegel  
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GitHub: <https://github.com/eigenvalue000>  
Portfolio: <https://eigenvalue000.github.io/portfolio-page/>

**Objective:** To obtain gainful employment as a software developer to learn more programming languages and reinforce programming languages that I already know.

**Skills and Abilities:**

**Computer Skills** – HTML, CSS, JavaScript, Python, C, React, MySQL, MongoDB, Express.js, Node.js, jQuery, Third Party REST APIs, WordPress, Excel, Word, PowerPoint, Outlook, A+ Certification

**Math Skills** – Real Analysis, Complex Analysis, Ordinary Differential Equations, Partial Differential Equations, Linear Algebra, Householder Triangularization, Gram-Schmidt Matrix Decomposition, Singular Value Decomposition, Simplex Method Optimization, Quadratic Programming Optimization, Numerical Integration, Numerical Differentiation, Polynomial Interpolation, Floating-point Operations

**Statistical Analysis** – Least Squares and Linear Regression, Stochastic Processes, Markov Processes, Gaussian Probability Distribution, Poisson Probability Distribution, Binomial Probability Distribution, Arithmetic Mean, Geometric Mean, Variance, Standard Deviation, Covariance Matrix, Correlation Coefficients

**Quantitative Analysis** – Multi-period Portfolio Optimization, Single-period Portfolio Optimization (Markowitz Theory), Options Pricing through Replication, Options Pricing Using the Black-Scholes-Merton Model, Algorithmic Trading, Technical Indicators

**Machine Learning** – Support Vector Machine, K-means Clustering, Network Flow Theory, Data Mining, Pattern Recognition

**Accounting Skills** - Tax Preparation, Auditing, Accrual Accounting, Posting, T-accounts, Accounting Cycle, Payroll, Government Funds, Financial Statement Analysis and Preparation, Multi-step Income Statement, Single-step Income Statement, Statement of Cash Flows, Balance Sheet, Statement of Stockholder's Equity, Accounting Ratios, Bank Reconciliation, FIFO Inventory, LIFO Inventory, Weighted Average Inventory, Specific ID Inventory, Bill.com, Sage Intacct, Expensify, QuickBooks Online.

**Leadership** – Team Management, SCRUM, Project Management, MIRO Boards, Kanban Boards, Public Speaking, Parliamentary Procedure

**Communication** – Proficient Writing, Email, Video Calls, Instructional YouTube Videos

**Experience:**

02/15/2011 to 05/07/2012 Remotely Piloted Sensor Operator Apprentice, *United States Air Force*

Received an honorable discharge due to service-connected disability during service.

01/01/2022 to – Freelance Software Developer / Manager, *Martingale Stochastic Process LLC*

Managed a small team that developed a website for a small business lending company.

**Education:**

Fall 2009 to Spring 2015 Associate in Science in Mathematics, Sacramento, CA, *American River College*

Fall 2009 to Spring 2015 Associate in Science in Physical Science and Mathematics, Sacramento, CA, *American River College*

**Fall 2016 to Spring 2021 Bachelor of Science in Mathematical Analytics and Operations Research with a minor in Economics, Davis, CA, *University of California, Davis***

**Summer 2021 to Fall 2021 Full-stack Developer Certification, Davis, CA, *University of California, Davis Continuing and Professional Education***

Fall 2021 Associate of Arts in Accounting, Davis, CA, *University of California, Davis Continuing and Professional Education*

Spring 2022 to Fall 2022 Associate of Arts in Accounting, Sacramento, CA, *American River College*

Spring 2023 to Present Associate of Science in Computer Science, Sacramento, CA, *Sacramento City College*

Spring 2023 to Present Master of Science in Data Analytics, Columbus, OH, *Franklin University*

**Leadership:**

American River College Student Senate President

American River College Club and Events Board Vice President  
American River College Student Senator  
Research Club – Club and Events Board Representative