**J. Rafael García**

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| |  | | --- | | **SUMMARY** |   Results-driven developer with experience in statistical modeling and data analysis. Experienced in implementing and analyzing appropriate low variability models to predict customer ratings, stock price trends, market volatilities, and patients' life expectancy. Able to create elegant visualizations and rigorous data analysis reports.  **EDUCATION** |

**University of Wisconsin - Madison** **Madison, WI**

*Degree: Bachelor of Arts in Statistics, Mathematics, and Computer Science* (*GPA: 3.58) May 2021*

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| **PROFESSIONAL EXPERIENCE** |

**American Family Insurance,** *Madison, WI**Oct 2021 – Present*

*Application Development Engineer (Oct 2021 – Present)*

* Developed and tested REST Java Spring microservices to improve backend efficiency of services by 12%
* Utilized SCRUM to deliver project milestones on 2-week sprints. More than 95% of tickets resolved within their sprint
* Broke down and evaluated user problems using test scripts, personal expertise, and probing questions

**Advanced Skills:** REST, SCRUM, troubleshooting, testing

**Division of Information Technology at UW Madison,** *Madison, WI**Oct 2019 – May 2021*

*Developer*

* Developed 2 software applications for statistical modeling and graphic analysis to understand data and drive accurate insight using R shiny and JavaScript
* Revised, modularized, and updated legacy code using modern development standards to reduce operating costs by 3% and improving latency by 7%
* Developed 3 programs from ground up using the market-focused approach to eliminate waste and streamline implementation cycle

**Advanced Skills:** visualization, modeling, algorithm design, databases, optimization

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| **PROJECTS** |

**Cryptocurrency price predictor** *(Skills: R, Docker, Machine learning)* [*GitHub*](https://github.com/rafagarci/price-predictor)

* Predicted Bitcoin price fluctuations in the next 24 hours with 87% accuracy using 6-hour intervals
* Deployed the code for any machine through a custom Docker container

**Yelp rating predictor** *(Skills: R, Regression analysis, multithreading)* [*GitHub*](https://github.com/rafagarci/yelp-rating-predict)

* Predicted customers’ Yelp star ratings with a mean squared error of 0.88 using previous reviews
* Modified functions such as mcapply to run multiple threads

**Pyshred** *(Skills: Python, Cybersecurity, multiprocessing, testing)* [*GitHub*](https://github.com/rafagarci/pyshred)

* Implemented Gutmann’s 35 pass method in Python; tested on Linux, MacOS, and Windows
* Extended Unix’s shred command to make it flexible

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| |  | | --- | | **ACHIEVEMENTS & AWARDS** |  * Improved boot efficiency of Linux’s servers by 40% by implementing appropriate bash boot scripts * Implemented time series models (GARCH + ARIMA) for trading crypto currencies to boost profit by 25% * Automated enterprise systems using scripting languages to save 2 hours of work per week * Assembled a high school’s rugby team to won regional championships in 5 months   **SKILLS** |

Programming: R, SQL (sqlite3 & mysql databases), Python, Jupyter Notebook, Java, Javascript, Firebase, Docker, Bash, Markdown, HTML, CSS, XML, LaTeX, SAS, C, C++, pandas, matplotlib, React.js, Node.js, Express.js, Ggplot2, Plotly, D3.js, Spring, SCRUM, REST

Version Control: Git (Hooks, GitHub, GitLab, and custom servers)

Machine Learning: TensorFlow, Google Colab, computational modeling

Math & Statistics: CNN, algorithm analysis, regression, multivariate statistics, non-parametric statistics, time series analysis, linear optimization, linear algebra, advanced probability, cryptography, combinatorics, real analysis, stochastic processes

Languages: English (Fluent), Spanish (Fluent), German (B1 Certified)