Stuart Wayland
Researcher | Tutor | Software Developer

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⚲ 132 Marine Ave, Aptos, CA 95003   ⓘ U.S. Citizen

✤ Honors and Awards

2022	Computer Science Undergraduate Research Showcase Speaker
2021-2022	Distinction in the Major Program, Department of Computer Science, UCSB
2019-2022	UCSB College of Letters and Science and College of Engineering Dean's Honors List
2018	International Baccalaureate Diploma Recipient with Excellence
2018	El Toro High School Top 20 Award (Ranked 9 of 624)

🎓 Education

September 2022 — **University of California, Santa Cruz**
> M.S Computer Science
> Pursuing a Masters in Computer Science in the Baskin School of Engineering at UC Santa Cruz

June 2022
September 2018 — **University of California, Santa Barbara**
> **B.S. Mathematics**, Upper Division GPA : **3.53**
> **B.S. Computer Science**, Upper Division GPA : **3.57**
> **Minor in Music**, Overall GPA : **3.61**
> Relevant Coursework : *Markov Chains, Algorithms and Complexity, Data Structures, Application Development, Cryptography, Operating Systems, Probability and Applied Statistics, Data Science, Abstract Algebra, Number Theory, Real/Complex Analysis, Set Theory, Linear Algebra, Topography*

June 2018
September 2014 — **El Toro High School, Lake Forest, California**
> International Baccalaureate Diploma, AP Scholar, Model United Nations Participant
> GPA : 4.8, Class Rank : 9, SAT 1540, ACT 34

🗊 Publications

Undergraduate Thesis   2022
🔗 Quantifying Gerrymandering with Simulated Annealing
Research completed for the Department of Computer Science Distinction in the Major Program at the University of California, Santa Barbara.

Markov Chains | Physics | Statistical Application | R

💼 Professional Experience

June 2022
September 2021 — **Undergraduate Researcher/Speaker, Gerrymandering Project UCSB**
> Researching applications of Markov Chain Monte Carlo techniques for evaluation of the fairness of enacted districting plans
> Attended seminars and gave presentations on the methods and results of new techniques for political science analysis of voting
> Worked with a group under Professor Eric Vigoda to generate algorithms for producing psuedorandom districting plans for geographic areas

R | python | java | ArcGIS

August 2020	**SOFTWARE/RESEARCH DEVELOPER**, Encryptek LLC Lake Forest CA
June 2018	› Researching ideal regimes in which to deploy/extend their technology.
	› Development of driving program to offload SHA-256 computation in cypto-mining
	`C++` `python` `jupyter notebooks.`

June 2020	**Software Developer, UNDERGRADUATE RESEARCH PROJECT** Santa Barbara CA
January 2020	**APPLICATION AND DATABASE DESIGN**
	› Front and back-end application design and maintenance using NodeJs and SpringBoot frameworks to construct, store, and display information in data bases.
	› Agile Programming Practices such as sprint planning, retrospectives, peer-programming, and user stories used to process and reflect upon user response.
	`Agile` `Java` `JavaScript` `Ruby` `Python` `NodeJS` `SpringBoot` `MongoDB.`

Present	**EMERGENCY MEDICAL TECHNICIAN**, Orange County EMS California
August 2021	› NREMT certified and licensed in the state of California as a practicing Emergency medical technician.
	`Medical Training`

🚌 TEACHING EXPERIENCE

January 2017	**MUSIC INSTRUCTOR**, Kwala Music Lake Forest CA
July 2017	› Responsible for the scheduling and tutoring of beginner and novice piano and cello students.
	› Constructed incentives, created performing opportunities, and designed lesson plans.
	› Met weekly with students for a private 1 hour lesson.
	`Teaching` `Music Theory` `Private Tutoring` `Motivation`

May 2015	**CELLO INSTRUCTOR/SOLOIST/PERFORMER**, Orange County Cello Choir Tustin, California
August 2017	› Aid for Dr. Carter Dewberry's Music Theory class offered to the youth members for the OC Cello Choir.
	› Designed cooperative learning tasks for a group of 8-10 intermediate cello students aimed to provide engaging interaction with music theory material.
	`Teaching` `Music Theory` `Lesson Planning` `Interactive Group Work`

Present	**PRIVATE TUTOR**, El Toro High School/UCSB
November 2016	› Privately tutored students ranging from elementary school to lower division undergraduates.
	› Provided direction and conceptual aid in undergraduate material including differential equations, linear algebra, calculus, probability theory, basic programming, and applied statistics
	`Mathematics` `Statistics` `Computer Science` `Organization` `Learning Approaches` `Study Techniques`

</> PROGRAMMING LANGUAGES

C++ ●●●●●
LaTeX ●●●●●
Python ●●●●○
R ●●●●○
Java ●●●●○
Javascript ●●●○○
HTML ●●●○○
Matlab ●●○○○

✚ SKILLS

> Github
> Overleaf
> Jupyter Notebooks
> RStudio
> Visual Studio Code
> Agile Software Developement
> Microsoft Office
> Mongo Data Bases

❝ REFERENCES

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☎

Professor Andrew Moshier
Professor Of Mathematics and Computer Science, CHAPMAN UNIVERSITY
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