Stella Astbury

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[Linkedin](#) | [Github](#) | [Website](#) | [Portfolio](#)

Professional Summary:

Inspired by the Misogi method, tackling ambitious challenges—from marathons to amateur boxing—to build resilience and discipline. Applying the same drive and creativity to entrepreneurial and technical projects, including self-publishing, modeling, and website design, delivering results through focused problem-solving and initiative.

Education:

University of California, San Diego   Graduated 2025
Bachelor of Science in Mathematics and Computer Science — GPA: 3.236
- Study Abroad: Sea Turtles and Tropical Ecology, Guanacaste, Costa Rica

Harvard Extension School, Cambridge   Dual Enrollment, 2022
- Principles of Legal Writing: 2020, Food and Nutrition in Health and Wellbeing: 2021, Philosophical Foundations of Economic Justice: 2022

Skills:

Languages: Java · Javascript · C++ · Python · Arduino
Software & Frameworks: AWS (Lambda, DynamoDB, CloudWatch) · microCT processing · 3D segmentation · Streamlit · XCode · Alpha Vantage API · Markdown (MD) · GitHub · [Next.js](#) · React · Wix · yFinance · Jupyter · Shell Scripting
Algorithms & Development: Data Structures · Algorithm Optimization · Object-oriented Design · Cloud Computing · API Development
Professional: Public Speaking · Technical Communication · Persuasive Writing · Modeling

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Projects:

Alexa Skill for Amazon Audible - *Software Engineer Intern, Amazon*
- Designed voice-activated Alexa skill integrating the Goodreads API using AWS Lambda, DynamoDB, and CloudWatch resulting in automated booklist creation, improving user interactions through hands free browsing.

Stock Portfolio Analyzer - *Personal Project*
- Built a Python dashboard implementing Sharpe ratio, beta, and moving averages, resulting in clearer visualization of portfolio risk and real-time performance insights for quick decision-making.

Fitness & Nutrition Tracker App (In Progress) - *iOS App Development*
- Developing a full-stack iOS app to log workouts, nutrition, and progress analytics, aimed at centralizing training data for progressive overload for hypertrophy.
- Integrating Apple HealthKit for real-time biometrics, which will enable automatic syncing and more accurate performance metrics.

Mapping Reduction of Halting Problem - *Computability Research (C++)*

- Implemented a computable reduction from the Halting Problem to EQ_TM, demonstrating equivalence through constructive proofs and strengthening understanding of undecidability.

Experience:

F^2 Lab, UC San Diego   2025
Research Assistant – Image Processing   La Jolla, CA
- Optimized Python pipelines for microCT image processing across Exercise and Bone Fatigue projects, increasing processing efficiency and enabling faster extraction of higher-resolution quantitative outputs for research collaborators.
- Collaborated with researchers to translate imaging needs into computational tools, streamlining data workflows and supporting publication-ready results.

LGNDRY Group   2025
Marketing & Promoting   San Diego, CA
- Coordinated with various venues to curate nightlife experiences, resulting in increased event attendance.

Coastal Collective & Lead Wolf   2024
Marketing & Content Intern / Brand Model   San Diego, CA
- Collaborated with creative and business teams to design outreach strategies, leading to more cohesive branding and targeted audience growth.

Trilogy Sanctuary   2023
Event Manager, Front of House   La Jolla, CA
- Coordinated Full Moon, Meditation, and Dance events, resulting in 200+ tickets sold.

Surf Diva   2023
Surf Instructor   La Jolla, CA
- Assessed ocean conditions and public safety factors to guide surf lessons, ensuring client safety while improving beginner surf technique and confidence.

Massachusetts Institute of Technology   2021-2023
Lifeguard & Swim Instructor   Cambridge, MA
- Developed personalized lesson plans, resulting in measurable skill improvement in youth and adult swimmers.

Amazon Audible   2021-2022
Paid Intern   Cambridge, MA
- Collaborated in a multi-developer GitHub workflow, reducing integration errors and improving deployment consistency.

Volunteer & Community Service:

Harvard Square Homeless Shelter (Cambridge, MA)
Mass Audubon Wildlife Sanctuary (Lincoln & Wellfleet, MA)
Triton Boxing Club - co-founder