HENRY MALLON

Redwood City, CA linkedin.com/in/henrymallon

650.454.9043 hdmallon@gmail.com

Results-oriented contributor with a diverse background spanning computer science and cognitive neuroscience. \blacktriangleright

Proven track record improving operational efficiency through strategic planning and data-driven insights.

Adaptable professional with strong technical skills in computer science, committed to continuous learning and development.

Strengths & Expertise: Computer Science Foundations • Big Data Analytics • Technical Communication

Interpersonal Skills • Innovation and Problem-Solving • Adaptability and Flexibility

Continuous Learning and Development

Technical Skills: Excel • SQL • Python • Java • C • MATLAB • Neural Networks (PyTorch) • Computer Vision

> Algorithms • Computational Neuroscience & Bayesian Modeling • R • Kotlin & Android Development • Web Development (HTML/CSS, JavaScript, ¡Query, Python & Flask, Web Forms, Databases & SQL, TLS/SSL & Certificates, User Authentication, JQuery & Ajax)

EXPERIENCE



AVALON COLLEGE ADVISING

Essay Reviewer & Coach Web Designer/Developer

Menlo Park, CA (remote) Sep. 2023 - Feb. 2024

- Project Management: Managed college application essays across dozens of schools and students.
- **Communication**: Provided ongoing personalized feedback to high school students applying to top-level colleges.
- Data Analysis: Conducted competitive analysis, developed a comprehensive strategy for brand engagement, and implemented a fully functional and modern company website, which was well-received by the owner and team.

EDUCATION



UNIVERSITY OF ROCHESTER

Bachelor of Science in Brain & Cognitive Sciences Bachelor of Arts in Computer Science

GPA: 3.75/4.0

Minors: Psychology, Philosophy

PUBLICATIONS



2023 IEEE INTERNATIONAL CONFERENCE ON BIG DATA (BIGDATA)

IEEE Xplore: https://ieeexplore.ieee.org/document/10386096

Sorrento, Italy December 2023

Rochester, NY

Aug 2019 - May 2023

Investigating the Effectiveness of Deep Learning and CFA Interpolation Based Classifiers on Identifying AIGC

Artificial Intelligence, Deep Learning, & Computer Vision: Developed novel methods for detecting photorealistic Al-generated images. Compared the results of classifiers using color filter array (CFA) interpolation to CNN classifiers (InceptionV3, DenseNet121, ResNet50). Evaluated performance on diverse and sparse datasets, achieving higher than human levels of accuracy (86.1%) with CNN classifiers and moderate performance with CFA classifiers (73.55%), without extensive training or other deep learning methods.

UNIVERSITY ENGAGEMENT



COLLEGIATE CATEGORY A MOUNTAIN BIKE RACING

Team Management, Optimization, & Communication: Contributed to team management and applied effective optimization and process improvement strategies, leading our small team to a remarkable third-place conference finish.



COMPETITIVE JUGGLING

Financial Planning: Juggling club executive board member with responsibility for tracking and initiating all organization expenditures and income.

Skills & Accomplishments: Competed in prestigious international events in Indiana, Quebec, and Texas for 7-ball, 5-ring, and 5-club juggling.



RUBIK'S CUBE

Leadership, Continuous Learning & Development: Established a community for Rubik's cube enthusiasts, fostering a passion for problem-solving and intellectual challenges.