Isaac Wasserman

isaacwasserman.com | Philadelphia, PA | isaacrwasserman@gmail.com | (856) 332-2539

Awards: 300+ GitHub Stars for MCP Tooling (mcp-langchain-ts-client, mcp-snowflake-server, mcp-vegalite-server)
"Best Paper" at VISAPP 2025 (Patch-Based Deep Unsupervised Image Segmentation using Graph Cuts)
"Best Use of Open-Source Models" at the 2024 Contrary Generative AI Hackathon (Math Illustrated)
"Best Original Project" at the 2023 Penn Computer Vision Competition (UnShade)

Education:

M.S. Computer and Information Science | University of Pennsylvania - Philadelphia, PA **August 2022 – May 2024**
Accelerated studies in: Contemporary Deep Learning, AI, Computer Vision, Machine Learning

B.S. Computer Science | Haverford College - Haverford, PA **August 2019 – May 2023**
Graduated Cum Laude with High Departmental Honors
Thesis: *Fully-Unsupervised Image Segmentation via Graphically-Guided Convolutional Neural Networks*

Experience:

Senior Software Engineer (Promoted from Intern) | Ottoguard - Remote **August 2024 – Present**
Leveraging agentic AI to engineer an autonomous vulnerability mitigation and asset protection platform

- Drive end-to-end development of user-facing product features across frontend, backend, and AI components as technical lead for customer-facing platform
- Serve as company's principal AI domain expert, advising AI strategy and implementation across product initiatives
- Shape product strategy and user experience by combining AI expertise with SaaS product knowledge, contributing to roadmap decisions and technical architecture
- Architect and deliver FedRAMP-compliant, highly available solutions on AWS infrastructure, powering critical infosec operations for enterprise clients including GardaWorld and Schneider Electric

Research and Development Intern | QReal - Remote **May 2024 – July 2024**
Developed an AI alternative to product photography using diffusion models and gaussian splatting

Deep Learning Researcher | Bowdoin College - Remote **May 2024 – September 2024**
Investigated the transformer architecture and modeling attention mechanisms as a series of convolutions

- Increased efficiency of ViTs for dense-prediction using a novel and fully convolutional model of linear self-attention

Computer Vision Researcher | Haverford College - Haverford, PA **January 2023 – August 2023**
Researched application of classical computer vision methods to deep image segmentation in an unsupervised paradigm

- Developed novel unsupervised zero-shot segmentation algorithm, outperforming previous state of the art by over 9%
- Improved deep segmentation algorithms using principled energy minimization techniques

Teaching Assistant | Haverford College - Haverford, PA **August 2020 – May 2023**
Co-instructed three 300-level and one 200-level computer science courses: Computer and Network Security, Discrete Mathematics, Deep Learning for Computer Vision, Machine Learning

Adversarial ML Researcher | Penn State University - State College, PA **May 2022 – August 2022**
Researched and authored paper on the effect of attention modules on adversarial robustness of medical image classifiers

Information Security Researcher | University of Arizona - Tucson, AZ **June 2021 – August 2021**
Researched the application of neural networks and random forests to the recovery of vehicle location information from diagnostic signals alone, and co-authored research paper on findings

Full Stack Web Developer | MATchMapper - Philadelphia, PA **April 2021 – December 2021**
Co-developed web application with a team of public health researchers to help individuals struggling with opioid addiction to find medically-assisted treatment

Research:

Isaac Wasserman and J. F. S. R. Neto, "Patch-Based Deep Unsupervised Image Segmentation using Graph Cuts", in *Proceedings of the 20th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*, 2025. 10.5220/0013151300003912.

Isaac Wasserman, "Adversarially Robust Medical Classification via Attentive Convolutional Neural Networks", arXiv:2210.14405 (2022).

Isaac Wasserman, "Modeling the Graphotactics of Low-Resource Languages Using Sequential GANs", arXiv:2210.14409 (2022).