## William Daniels

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RESEARCH INTERESTS	SEARCH       image generation, generative adversarial networks, auto colorization, neuroevolution, spiking neural networks         TERESTS       TERESTS	
EDUCATION	<ul> <li>Northwestern University</li> <li>Master of Science in Computer Science</li> <li>GPA: 3.92/4.00</li> <li>Thesis: Multi-Stage Automatic Line-Art Colorization with Style and Color Priors</li> <li>Committee: Dr. Aggelos Katsaggelos (Chair), Dr. Emma Alexander, Dr.Mohammed Alam</li> </ul>	2021 – 2023
	Louisiana State University Bachelor of Science in Computer Science, <i>Cum Laude</i>	2019 - 2021
	University of Louisiana, Lafayette	2016 - 2018
<b>EXPERIENCE</b> Johns Hopkins University Applied Physics Laboratory Associate Professional Staff I Applied research and engineering for machine learning capabilities with the A3G Weapon Control		2024
Concep NASA,	ts Development Group. Goddard Space Flight Center	2022
Fall Inte • •	rn Developed multiple neural network regression models to predict in-situ water clarityfrom multispectral satellite data. Built a codebase for data collection, model training, and visualization withflexibility in mind for the NASA team going forward. Validated a variety of trained models (w/ various hyperparameters and architectures)for performance on multispectral/in-situ test sets.	
NASA, Summer • •	Goddard Space Flight Center Intern Developed multiple neural network regression models to predict in-situ water clarityfrom multispectral satellite data. Built a codebase for data collection, model training, and visualization withflexibility in mind for the NASA team going forward. Validated a variety of trained models (w/ various hyperparameters and architectures)for performance on multispectral/in-situ test sets.	2022

## PUBLICATIONS

[1] <u>William Daniels</u>, Troy Ames, Stephanie Schollaert Uz, and J. Blake Clark. (2023) Improving Extreme Value Prediction for Water Clarity Using Weighted Regression Models. *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*.

ABSTRACTS	<ol> <li>William Daniels, Troy Ames, Stephanie Schollaert Uz, and J. Blake Clark. (2023) Improving Extreme Value Prediction for Water Clarity Using Weighted Regression Models. <i>IEEE International</i> <i>Geoscience and Remote Sensing Symposium (IGARSS)</i>. (Oral presentation)</li> </ol>		
HONORS AND AWARDS	Tops Honors Award Magnolia Scholarship	2016 – 2020 2016 – 2018	
ORGANIZATIONS	<ul> <li>Northwestern AI Journal Club (AIJC), Member</li> <li>Presented thesis work "Multi-Stage Automatic Line-Art Col</li> <li>Presented review of "Hierarchical Text-Conditional Image Ramesh, et al.</li> <li>Presented review of "Tag2Pix: Line Art Colorization Using Loss" by Kim et al.</li> <li>Presented review of "Segmentation in Style: Unsupervise StyleGAN and CLIP" by Pakhomov et al.</li> </ul>	Line-Art Colorization with Style and Color Priors" tional Image Generation with CLIP Latents" by zation Using Text Tag with SECat and Changing Unsupervised Semantic Image Segmentation with	
	<ul> <li>Presented review of "Unpaired Image-to-Image Translatio Networks" by Isola et al</li> </ul>	n of Cycle Consistent Adversarial	