

1 Publications List

Dr. Carlos Osorio Quero

- [1] I. R. C. A. Osorio Quero and J. Martinez-Carranza. “Improving NIR Single-Pixel Imaging: Using Deep Image Prior and GANs”. In: *J. Opt. Soc. Am.* (Dic. 2024). Accessed on 12/02/24. URL: <https://opg.optica.org/josaa/abstract.cfm?doi=10.1364/JOSAA.541763>.
- [2] C. A. Osorio Quero and J. Martinez-Carranza. “Physics-Informed Machine Learning for UAV Control”. In: *2024 21st International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*. 2024, pp. 1–6. DOI: [10.1109/CCE62852.2024.10770871](https://doi.org/10.1109/CCE62852.2024.10770871).
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- [7] C. O. Quero, D. Durini, J. Rangel-Magdaleno, J. Martinez-Carranza, and R. Ramos-Garcia. “3D Human Pose reconstruction Single-pixel imaging”. In: *14th annual International Micro Air Vehicle Conference and Competition*. Ed. by D. Moormann. Paper no. IMAV2023-4. Aachen, Germany, Sept. 2023, pp. 33–39. URL: <http://www.imavs.org/papers/2023/4.pdf>.
- [8] C. O. Quero, D. Durini, J. Rangel-Magdaleno, J. Martinez-Carranza, and R. Ramos-Garcia. “Deep-learning blurring correction of images obtained from NIR single-pixel imaging”. In: *J. Opt. Soc. Am. A* 40.8 (Aug. 2023), pp. 1491–1499. DOI: [10.1364/JOSAA.488549](https://doi.org/10.1364/JOSAA.488549). URL: <https://opg.optica.org/josaa/abstract.cfm?URI=josaa-40-8-1491>.
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- [10] C. A. Quero, D. Durini, J. de Jesús Magdaleno, J. Martinez-Carranza, and R. Ramos-Garcia. “Fast NIR-Single-Pixel-Imaging enhancement under scattering environment”. In: *13th International Micro Air Vehicle Conference*. Ed. by G. de Croon and C. D. Wagter. Paper no. IMAV2022-6. Delft, the Netherlands, Sept. 2022, pp. 53–58. URL: <http://www.imavs.org/papers/2022/6.pdf>.
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- [12] A. Manjarres Garcia, C. Osorio Quero, J. Rangel-Magdaleno, J. Martinez-Carranza, and D. Durini Romero. “Parallel-Pipeline Fast Walsh-Hadamard Transform Implementation Using HLS”. In: *2021 International Conference on Field-Programmable Technology (ICFPT)*. 2021, pp. 1–4. DOI: [10.1109/ICFPT52863.2021.9609874](https://doi.org/10.1109/ICFPT52863.2021.9609874).
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- [16] C. A. O. Quero, D. D. R. D. Romero, J. Rangel-Magdaleno, J. Martínez-Carranza, and R. Ramos-García. “3D Reconstruction based on NIR single-pixel for drone navigation under rainy condition”. In: *12th International Micro Air Vehicle Conference*. Ed. by J. Martínez-Carranza. Paper no. IMAV2021-24. Puebla, México, Nov. 2021, pp. 188–195. URL: <http://www.imavs.org/papers/2021/24.pdf>.
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- [18] C. A. Osorio Quero, D. D. Romero, R. Ramos-García, J. de Jesús Rangel-Magdaleno, and J. Martínez-Carranza. “Towards a 3D Vision System based on Single-Pixel imaging and indirect Time-of-Flight for drone applications”. In: *2020 17th International Conference on Electrical Engineering, Computing Science and Automatic Control (CCE)*. 2020, pp. 1–6. DOI: [10.1109/CCE50788.2020.9299125](https://doi.org/10.1109/CCE50788.2020.9299125).
- [19] C. O. Quero, D. Durini, R. Ramos-García, J. Rangel-Magdaleno, J. Martínez-Carranza, J. L. Olvera, and A. Corona. “Implementation of a hyperspectral integrated vision system combining radar technology and single-pixel optical principle for unmanned ground vehicles (UGV)”. In: *Radar Sensor Technology XXIV*. Ed. by K. I. Ranney and A. M. Raynal. Vol. 11408. International Society for Optics and Photonics. SPIE, 2020, p. 1140815. DOI: [10.1117/12.2558929](https://doi.org/10.1117/12.2558929). URL: <https://doi.org/10.1117/12.2558929>.
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- [26] C. A. O. Quero and J. Martinez-Carranza. “A Review on Unmanned Aerial Systems in Search and Rescue Technology: Exploring Open Challenges and Future Applications”. In: *International Journal of Disaster Risk Reduction* (xx 2024). Accessed on 11/05/24. URL: <https://www.1px-vision.com>.
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PhD Thesis

- [28] C. Osorio. “Three-dimensional hyperspectral camera based on near-infrared single-pixel imaging”. PhD thesis. Sept. 2022. DOI: [10.13140/RG.2.2.15604.97923](https://doi.org/10.13140/RG.2.2.15604.97923).

Patents

- [29] C. O. Quero. “3D-NIR Enlarged Creation Image System and Method”. Patent MX/a/2022/016091. INAOE. 2022.
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