

CONTACT INFORMATION	<p>dhernandez0@gmail.com Barcelona, Catalonia, Spain</p> <p>https://www.danihernandez.eu Nationality: Spanish</p>
PROFESSIONAL EXPERIENCE	<p>Senior Research Engineer May 2020-Currently Slamcore, Remote Computer Vision, Deep learning, Panoptic Segmentation, CUDA, TensorRT <ul style="list-style-type: none"> Developed a fast panoptic segmentation model for Xavier NX achieving 30 fps. Contributed to an ICRA paper on deep learning-based depth completion. </p> <p>Research Engineer March 2019-February 2020 Huawei Noah's Ark lab, London, United Kingdom Computer Vision, Deep learning, Color Constancy (Auto White Balance) <ul style="list-style-type: none"> Authored a CVPR paper on deep learning-based multi-camera color constancy. </p> <p>PhD Internship January 2017-July 2017 Mercedes-Benz Group AG, Stuttgart, Germany Computer Vision, Stixel World, 3D representation of driving scenes <ul style="list-style-type: none"> Developed a faster and more accurate version of the Stixel World. </p>
EDUCATION	<p>PhD in Computer Vision 2020 Universitat Autònoma de Barcelona, Spain <ul style="list-style-type: none"> Thesis title: Embedded 3D Reconstruction for Autonomous Driving Adapt to GPU and parallelize (CUDA) computer vision algorithms. Computer Vision contributions: Developed a faster and more accurate version of the Stixel World. </p> <p>MSc in Computer Vision 2015 Universitat Autònoma de Barcelona, Spain</p> <p>Bachelor of Computer Science 2014 Universitat Autònoma de Barcelona, Spain</p>
PUBLICATIONS	<p><i>Journal Papers</i></p> <p>Self-Supervised Depth Completion for Active Stereo 2022 In <i>IEEE Robotics and Automation Letters</i> (2022) (RA-L and ICRA)</p> <p>3D Perception with Slanted Stixels on GPU 2021 In <i>IEEE Transactions on Parallel and Distributed Systems</i> (2021) (TPDS)</p> <p>Slanted Stixels: A way to represent steep streets 2019 In <i>International Journal of Computer Vision</i> (2019) (IJCV)</p> <p><i>Conference Papers</i></p> <p>A Multi-Hypothesis Approach to Color Constancy 2020 In <i>Computer Vision and Pattern Recognition 2020</i> (CVPR)</p> <p>Slanted Stixels: Representing San Francisco's Steepest Streets 2017 In <i>British Machine Vision Conference 2017</i> (BMVC) Awarded as Best Industry Paper</p> <p>GPU-accelerated real-time stixel computation 2017 In <i>Winter Conference on Applications of Computer Vision 2017</i> (WACV)</p> <p>Embedded real-time stereo estimation via Semi-Global Matching 2016 In <i>International Conference on Computational Science 2016</i> (ICCS)</p>
SKILLS	Python, C/C++, CUDA, Matlab, OpenCV, numpy, PyTorch, Tensorflow
AWARDS	<p>Extraordinary PhD Prize - Universitat Autònoma de Barcelona 2023</p> <p>Best Industrial Paper Award - BMVC 2017</p>