JAVIER GAMAZO TEJERO

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EXPERIENCE

Machine Learning Intern

Jun 2023 - Sep 2023

NVIDIA

Santa Clara, CA, USA (Remote)

• Work on surgical video generation with diffusion models

Machine Learning Intern

Jun 2022 - Sep 2022

NVIDIA

Santa Clara, CA, USA (Remote)

• Developed a depth estimator for surgical scenes for NVIDIA Holoscan. Published as a Holohub application in the official repository

Quantitative Consultant

Nov 2018 - Sep 2020

Management Solutions

Madrid, Spain

- Quantitative risk modelling and validation for Tier 1 bank in Spain
- Developed and delivered a framework in Python to price financial instruments

Technology Consultant

Aug 2017 - Nov 2018

PwC (PricewaterhouseCoopers)

Madrid, Spain

• Developed Robotic Process Automation Solutions, working hand in hand with the client to discover processes that could be automated

EDUCATION

PhD in Biomedical Engineering, University of Bern

2020 - Present

Artificial Intelligence in Medical Imaging Lab

Working on cross-task transfer learning for segmentation and applying weak labels for coarse segmentation.

Relevant Coursework: Advanced Topics in Machine Learning, EXCITE Summer School (ETH - Zurich) on Medical Imaging, Molecular Biology.

Master of Science in Artificial Intelligence, National University of Distance Learning (UNED)

2018 - 2020

Relevant Coursework: Computer Vision, Evolutionary Computing.

Thesis: Detecting Overfitting in GANs with a Metric based on the Fourier Spectrum.

Bachelor of Science, Major in Physics, University of Zaragoza

2013 - 2017

Thesis: A stochastic model of corruption.

PUBLICATION LIST

Gamazo Tejero, J., Schmid, M., Márquez Neila, P., Zinkernagel, M. S., Wolf, S., Sznitman, R., (2024) SAM-DA: Decoder Adapter for Efficient Domain Adaptation. Under review

Haslebacher C., Gamazo Tejero, J., Prockter, L. M., Leonard, E. J., Rhoden, A. R., Thomas, N. (2024) Length, width, and relative age analysis of lineaments in the Galileo regional maps with LineaMapper. Under review

Ghamsarian, N., Gamazo Tejero, J., et al. (2023) Domain Adaptation for Medical Image Segmentation Using Transformation-Invariant Self-training. MICCAI 2023, Vancouver, Canada

Gamazo Tejero, J., Márquez Neila, P., Kurmann, T., et al. (2023) Predicting OCT biological marker localization from weak annotations Sci Rep 13, 19667

Gamazo Tejero, J., Zinkernagel, M. S., Wolf, S., Sznitman, R., Márquez Neila, P. (2023) Full or weak annotations? An adaptive strategy for budget-constrained annotation campaigns CVPR 2023, Vancouver, Canada

AWARDS

| GCB travel grant to CVPR'23 | 2023 |
|--------------------------------|------|
| ARVO-SWISS Travel Grant | 2023 |
| Tensorflow Community Spotlight | 2020 |

PERSONAL PROJECTS

Cell Simulation Sep 2022 - Present

Solving CME and RDME to simulate a simple cell

Curved NeRF Sep 2021 - Sep 2023

Embedding Finite Element Modelling Ray Tracing in NeRF to bend light rays and make it learn General Relativity

Person Remover Nov 2020

Built a system to remove objects from pictures and inpaint the result using Partial Convolutions and Pix2Pix

Virtual Walk Mar 2020

Live action recognition to walk around Google Street View. This project was awarded with Tensorflow Community Spotlight

SKILLS

Technical Skills Python, GLSL, Rust, C++ (limited)

Frameworks PyTorch, Tensorflow

Languages Spanish (mother tongue), English (fluent), Italian (fluent), German