ESTEVE SORIA FABIÁN

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SUMMARY

I hold a Master's degree in Artificial Intelligence and a Bachelor's degree in Electronics Engineering with a specialization in computer vision, real-time systems, and robotics. My primary interest lies in developing advanced technologies that enhance the quality of life for individuals. I focus on task automation to minimize human time spent on repetitive tasks, enabling them to concentrate on delivering genuine value.

WORK EXPERIENCE

SOFTWARE ENGINEER Jul 2021 – Currently | Amsterdam (Netherlands)

- Development of data acquisition system for new generation microscope. Using **C++17/20.**
- Development of **onnxruntime** based imaging inference libraries.
- Maintenance, upgrade and creation of **conan** recipes for build system.
- Imaging acquisition algorithms. Using **OpenCV**, **tensorflow**.
- Prototyping of real-time imaging acquisition systems for high force environments. Using **FFmpeg**, **OpenCV**, **mbedOS**, **C++**, **Python**, **electronics circuits**.

AI LEAD Jan 2021 – Jul 2021 | Remote (Netherlands)

- Incorporation of Emotion Research Lab **computer vision** technology to Uniphore's during **acquisition phase**.
- Deployment of a **highly scalable Deep learning platform** for video processing in **real-time**.

AI LEAD Jan 2019 – Jan 2021 | Valencia (Spain), Remote (Netherlands)

- Responsible of AI technology and development.
- Develop several products up to the acquisition of the company from a 100M$ Series C company.
- Deployment of a **highly scalable Deep learning platform** for video processing in the cloud using **AWS ECS.**
- Emotion recognition pipeline implementation in **C++** and **Tensorflow**.
- Development of a **multi-platform** automatic release for Windows, Linux (CPU, GPU) and **Jetson** platform.
- Core library **migration** from **C++98** to **C++14**.

COMPUTER VISION DEVELOPER Oct 2018 – Dec 2018 | Rome (Italy)

- Research of solutions for the task of real time **depth estimation** from monocular images. **GANs** and **VAEs** were the developed proofs of concepts.
- Development done inside a collaboration program between PI School and Cisco.

COMPUTER VISION DEVELOPER Ago 2017 – Oct 2018 | Vigo (Spain)

- Development and fine-tuning of object detection pipelines for embedded devices deployment based on Deep Learning (**Caffe** and **Tensorflow**).
- R&D of pipelines focusing in fast inference (**Intel Movidius, TensorRT**).
- Development of a system for vehicles and pedestrian counting and tracking in real-time. (**Jetson Board, C++14**)
- Development of a semi-automated development and testing suite for deep learning models to decrease the time between experiments.

JUNIOR CONSULTANT Feb 2016 – Feb 2017 | Valencia (Spain)

- Full stack web development.
  Keywords: **Java**, **Spring**, **Hibernate**, **ExtJS** and **Oracle RDBMS**.

DEVELOPER Jun 2015 – Feb 2016 | Valencia (Spain)

- Android development: Facebook friends quiz, sickness predictor, several speed reflex games.
- Development of booking platform for sport centers.
  Keywords: **Android, JavaScript, Java.**
- Embedded device prototyping and development.
  Keywords: **C**, **C++**, **CORTEX-M4, ANDROID, 3D Printing, Java.**

JUNIOR DEVELOPER Oct 2014 - Feb 2015 | Gdansk (Poland)

- Sales team support from the technical point of view.
- Technical presentations to potential customers.

EDUCATION

Oct 2021 – Jul 2023 **MSC ARTIFICIAL INTELLIGENCE'S RESEARCH -** *Specialty in reasoning and planning.* **Universidad Internacional Menéndez Pelayo (Spain)**

Master's thesis: Satellite imaging analysis for invasive algae detection in the surface of lakes.

Feb 2017 – Mar 2018 **SELF-DRIVING CAR NANODEGREE**
The program contains the next topics: **Computer vision**, **deep learning**, **machine learning**, **sensor fusion**, **localization**, **control systems** and **path planning**.

It is focused on developing the necessary understanding and technical skills to create an autonomous vehicle able to drive safely in public roads.

2010-2014 **DEGREE IN INDUSTRIAL ELECTRONICS AND AUTOMATION ENGINEERING -** *Specialty in embedded system and Real-Time computing.* **Universitat Politècnica de València. (Spain)**
Final thesis **(A grade)**: Cross-platform Qt application for the automatic control of liquids tank. **QML, C++**

2014 SPRING SEMESTER **ERASMUS SCHOLARSHIP**
Faculty of Electrical Engineering. **České vysoké učení technické v Praze. Prague (Czech Republic)**

OTHER SIDE PROJECTS

- Telegram bot to detect and classify fish species from photos. **Telegram API, Python, Tensorflow.**
- Autonomous maritime drone. **Raspberry Pi, C++, Python, Qt, QML, 3D modeling & printing.**
- Vehicle detection & tracking with OpenCV and deep learning approaches. **Python, OpenCV, Keras, Machine learning.**
- Lane detection in the road using computer vision techniques. **Python, OpenCV.**
- Traffic sign identification and classification. **Python, Tensorflow, OpenCV.**