Andrea Oriolo

Nationality: Italian | Date of birth: 23/08/1994

🏠 Bologna,Italy   🔗 Andrea Oriolo   ✉ oriolo.andre@gmail.com   📞 3205745920   🐙 Github

Work Experience

MODIS CONSULTING | AKKODIS | Software Engineer
Jen 2022 – Current | Bologna, Italy

Embedded Software Engineer Consultant in R&D - Handheld Scanners Team in "Datalogic S.p.A." .

➔ Responsible reviewer, tester and developer software improvements on C/C++ of handlheld scanner products of the Powerscan 9600 family, analyzing, debugging with Lauterbach development tools and fixing defects concerning software or hardware problems (connection, reading and writing, memory, timer, battery etc.) contributing to new releases of the software library.

➔ Contributor of Software Development Life Cycle (Design planning, Documentation and Testing) of a new Hardware Abstract Level of Decoding-library for handheld scanners for Bluetooth products.
Defined BTstack library supporting Bluetooth Basic Rate/Enhanced Date Rate (BR/EDR) and Bluetooth Low Energy (LE); most common Bluetooth profiles: HID over GATT (HOGP), BLE, SPP, RFCOMM.

➔ Contributor for updating and rewriting the application layer (C++) of scanner products by integrating the new HAL library. The aim was to make, via the new interface, the application layer and the entire design more flexible to change, multi-deliverable and hardware-independent.

Technical skills and other knowledge

• Acquired important knowledge of the world embedded gaining experience with C/C++ code and hardware debugging using software such as TRACE32.
• Gained experience with Linux, Windows and in particular Real Time operating systems (RTOS), working on process scheduling, time sharing, hardware and software resource management (RAM, I/O peripherals) as well as system calls for process/thread control, file management and communication.
• Developed a good knowledge in producing software modelling documentation creating different type of UML diagrams such as class, object and sequence diagrams, state diagram to model finite state machines (StarUML).
• Reinforced knowledge of object-oriented programming.
• Strong interest in Artificial Intelligence, especially in Deep Learning, Computer Vision and Machine Learning. I have carried out projects such as the development of Deep Learning Techniques for Anomaly Detection.
Implementation of Convolutional Neural Network(CNN) for handwritten digit recognition (MNIST) and for image classification (AlexNet) using Cifar dataset.
• Lane and traffic sign identification of an image provided using OpenCV: Canny Edge Detector, Hough Line and Circlce Transform.
• Object detection and tracking of a series of objects in a video.
• Also took part in projects on aspects of autonomous robotics such as perception, manipulation and navigation using Robot Operating System (ROS).

Soft Skills

• Ability to work effectively with all levels of firm personnel.
• Demonstrate ability to learn new IT concepts technologies fast.

Software Skills

PROGRAMMING LANGUAGES

Experienced
C/C++ - Python - Java

Familiar
UML - Bash (Unix shell) - SQL
HTML - CSS

LIBRARIES/FRAMEWORKS

TensorFlow - Keras - NumPy
Scikit-learn - Pandas
Matplotlib - OpenCV

TOOLS/PLATFORMS

Visual Studio Code - PyCharm
Eclipse - XCode - Git
Lauterbach TRACE32
StarUML - Microsoft Office

Education

UNIVERSITY OF PADUA
Oct 2018 - Oct 2021 | Padua, IT
Master's in Computer Engineering
with emphasis in Deep Learning, Machine Learnig and Artificial Intelligence

UNIVERSITY OF CALABRIA
Sep 2013 - Jul 2018 | Rende, IT
Bachelor's in Computer Engineering

Certification

ProfessionAI

• Programmazione con Python
• Computer Vision with Python
• Deep Learning and Artificial Neural Network - in progress

Language

Mother tongue: Italian
Other language: English - B1