

PERSONAL INFORMATIONS

Davide Donno



Gender Male

Birthdate 07/01/1997

Nationality Italian

PROFESSIONAL OBJECTIVE

Work in the following environments: Machine Learning, Computer Vision and Data Science

PROFESSIONAL EXPERIENCES

2016 – up to date

Work on Projects

I work on multiple projects related to the university in which I study, as underlined in the section “Additional Information: projects”

EDUCATION AND TRAINING

21/09/2019 – (planned) 04/2022

Graduating in Computer Engineering

University of Salento, Innovation Engineering Department
Lecce-Monteroni Street, Lecce, Italy

General

- Proficiency in Big Data Management
- Proficiency in Software Engineering
- Proficiency in Internet of Things
- Proficiency in System and Network Programming
- Proficiency di Decision Support System
- Proficiency in both Sequential and Parallel Algorithms and Data Structures
- Proficiency in Computer Vision
- Proficiency in High Performance Computing

09/2015 – 28/02/2019

Graduate in Information Technology, grade: 110/110 cum Laude

University of Salento, Innovation Engineering Department
 Lecce-Monteroni Street, Lecce, Italy
 www.unisalento.it

General

- Skills on Software Design Principles
- Skills on UNIX-Like Operating Systems
- Skills on Computer Networks
- Skills on Automation Fundamentals
- Skills on Communication Fundamentals
- Proficiency on Physics and Maths
- Proficiency on Probability Theory and Statistics

09/2010 – 07/2015

High School Degree, grade: 88/100

Scientific Lyceum Cosimo De Giorgi, Lecce (Italy)

PERSONAL PROFICIENCIES

Native Language

Italian

Other Languages

UNDERSTANDING		ORAL PRODUCTION		WRITTEN PRODUCTION
Listening	Reading	Interaction	Oral Production	
English	C2	C1	B2	B2

Communication Proficiency

Coordination and cooperation in several projects developed during my career as a master's degree student at University of Salento with colleagues.

Organization and Management Competencies

I have been leading actor of the management of many projects developed for exams as well as personal scopes. I defined deep in detail all the use cases referring to the problem faced and using all the technologies as well as my proficiencies (Neural Networks, Web, Mobile, Cloud, Embedded, CMS). In addition, when developing solutions for assigned projects, I enjoy using several tools which help me in organizing my work, such as Trello and Notion, while documenting all the design steps.

Professional Skills

Good skills in:

- Design and implementation of Machine Learning pipelines in Python
- Computer Vision tasks
- Design both Relational and Non-Relational Databases
- Manage Spring REST Servers
- Design both Web and Mobile architectures
- Development of plugins for CMSs
- Configure Cloud environments
- Embedded systems

Programming Languages

- Typescript, Javascript, HTML5, CSS, Python, C, Java, SQL, Shell Bash, STRIPS, AMPL

Libraries

- Tensorflow, Pytorch, Keras, MPI, Scikit-Learn, Pandas, Numpy

Frameworks

- Ionic, Angular, Bootstrap

Container Managers

- Docker (basic setup and management)

Database

- MySQL, SQLite, MongoDB

Content Management System

- Drupal

External APIs

- API Google Maps Javascript, Reverse Geocoding

Cloud Technologies

- Amazon AWS, Amazon S3, Google Firebase, Microsoft Azure IoT Hub

Used Software

- IntelliJIdea, WebStorm, CLion, PyCharm, XCode, GitHub, VSCode, BBEdit, Jupyter Notebook, Google Colab, SQLite Studio, MySQL Workbench, Spring Tool Suite, Postman, STM32Workbench, Eclipse, Scene Builder, Docker, Coppelia Sim, Cisco Packet Tracer, Trello

Graphical Tools

- App mockups, Balsamiq
- Draw.io for both UML and ER/MR diagrams

Digital Proficiency

AUTOVALUTAZIONE				
Elaboration of Informations	Communication	Content Creation	Security	Problem Solving
Intermediate User	Advanced User	Intermediate User	Advanced User	Intermediate User

I know and I use to daily exploit a variety of instruments for project and document versioning. I acquired these skills during my university career:

- Documents: Microsoft Word, Pages, Google Docs
- Spreadsheets: Microsoft Excel, Numbers, Google Spreadsheets
- Presentations: Microsoft Power Point, Keynote
- Notion for notes and documents management
- Trello for task management
- Git for code versioning during team projects

Driving license

B

ADDITIONAL INFORMATION

Certifications

- IELTS certification obtained on 22nd June 2019, average grade: 7.0/9.0

Projects (chronologically ordered)

- Java standalone design and implementation for a Multipurpose Sports Center (Software Design Principles exam)
- Both Mobile as well as Web Geolocation application for Automatic External Devices (AED) (Bachelor's degree thesis)
- Architectural design and implementation of a content (text or voice) management system based on indoor and outdoor geolocation. In this case Angular have been used. (Additional work)
- Architectural design and implementation of a multiuser system for urban security. Front End was developed in Angular and Ionic, and a Springboot REST Server for the back end (AWS for SQL and MongoDB databases hosting. S3 for image management and Firebase for notification management). (Software Engineering exam)
- Architectural Design and implementation of a Telemetry System of Cold Chain management for biodegradable products. Embedded device used was a STM32 Discovery of STMicroelectronics. Through Wi-Fi connection, the device could send a series of telemetry informations acquired from on-board sensors. The information then was conveyed to a previously configured Microsoft Azure IoT Hub. (Internet of Things exam)
- Design and implementation of Drupal plugin to configure a Content Management System to support distance learning. It has been designed a relational database, through Materialized Table approach. Springboot Backend, through several stored procedures, exchanged both configuration and data information with the main drupal backend. An Angular Front End has been provided, too. (Big Data Management exam)
- I worked on an application that involved all my software design competencies acquired during my studies. The application makes use of Ionic, and an SQLite database embedded in it. The application permits to IBS affected patients, to manage their daily diet, keeping track of their meals as well as their symptoms, enhancing the correlations between food, stress, and IBS disease. (personal interest)
- Pytorch U-Net implementation for Gland Instance Segmentation of Colorectal cells in patients affected by Adenocarcinoma. In this project has been widely used Google Colab for training and inference of the model. In particular, both offline and online data augmentation techniques have been deeply discussed and compared. (Computer Vision exam)
- Parallel design and implementation of Count Sketch Algorithm, using parallel message passing C library, MPICH. (Parallel Algorithms exam)
- Polynomial and Multivariate regression analysis and application of Kalman Filter to Covid-19 spread and development, using SIR compartmental model. In this case, it has been used Jupyter Notebook as well as Google Colab for Linear Multivariate Regression analysis and Kalman filter implementation. (High Performance Computing exam)
- Fire Weather Index map generation on EURO-Cordex domain with Machine Learning approaches. Tensorflow libraries have been deeply studied and applied for this work. A modified Pix2Pix GAN architecture has been implemented for the purpose, applying several techniques to make the model Physics Informed.

Interests

- Data Science
- Machine Learning and AI
- Computer Vision
- Internet of Things
- Data Analytics and Big Data
- Cyber Security
- Operating Systems
- Videogame Design

ATTACHMENTS

- IELTS certification of 22nd June 2019
- Bachelor's Degree in Information Technology at University of Salento. 28th February 2019