Emanuele Conti

Professional Goals

I aim at obtaining a junior position as a developer / Machine Learning engineer. I am interested in all fields concerning software development, ML, Deep Learning, programming, and problem-solving. I am a curious and full of interests person. I am very communicative, and I like teamwork, particularly with international people.

Mobile:
+39-388-1842699

Email:
emanuele2.conti@mail.polimi.it

Residence:
Stockholm, Sweden

Software skills (main):

Programming languages: Python, C, Java, bash, SQL, XML, HTML, CSS, Javascript, PHP, Assembly 8086

Machine/Deep Learning: Python, TensorFlow, Keras, Sklearn, Numpy, Matplotlib

OS: Mac OS X, Ubuntu, Windows

Database: PostgreSQL, MongoDB, SQL

Education

M.Sc. in Information Engineering - Music Engineering
Polytechnic University of Milan | 2018 - 2021

GPA: 107/110.
The course was held entirely in English.
Thesis topic: Development of a Deep Fake Classifier using ML and DL techniques.
The main skills learned are:
- Programming and computer science: design of advanced User Interfaces, creative programming, Machine Learning, fundamentals of computer security, cloud and virtual services, programming (especially with Python).
- Fundamentals of Machine and Deep Learning and advanced techniques to analyze audio data through ML and DL.
- Fundamentals of acoustics in rooms and free space.
- Signal and telecommunication theory, fundamentals of digital and analog signal processing.
- Sound analysis, synthesis, processing, and spatialization techniques.
- Electronics of microcomponents related to sound productions, like microphones, loudspeakers, and mixers.

B.Sc. in Computer Science and Engineering
Polytechnic University of Turin | 2012 - 2017

GPA: 99/110. The main skills learned are:
- Programming with medium and high-level languages, procedurals, and object-oriented, particularly C and Java. Extensive usage, adaptation, and creation of algorithms applied to problem-solving.
- Knowledge of the architecture of calculators, operative systems, relational databases (SQL), computer networks, fundamentals of signal theory.
- Fundamentals of electrotechnics, electronics, physics of electronics systems.
- Maths applied to engineer: analysis of real and complex functions, calculus, deep knowledge of binary systems, mathematical methods (automatic controls, Fourier and Laplace transforms), fundamentals of probability, and statistics.
- Fundamentals of science applied to engineering: maths (analysis, linear algebra, geometry), physics, chemistry.

Work experience

Mobile developer (stage)
Kliir s.r.l | 05/2017 – 09/2017

Assistant to the development of an Android app. The aim was to supply an interpreting online service available through the app itself.
Main languages/technologies used: Android, PHP, Twilio.

Database analyst (stage)
Aec Soluzioni s.r.l. | 09/2016 – 12/2016

Comparative analysis of the performances of various SQL and No-SQL databases in conditions of huge data load (Big Data).
Reference programming language: Java.
Main databases analyzed: PostgreSql, Cassandra, MongoDB, Firebase databases.

Projects

Deep Fake Classifier (M.Sc. Thesis) (10/2020 - 07/2021)

Development of a classifier based on machine and deep learning techniques. The classifier aims at recognizing real from deep fake speech based on emotional features. These features have been obtained from the reimplementation of an existing neural network-based classifier.
Main software/tools employed: Python with libraries such as Numpy, Sklearn, Scipy, Matplotlib, Tensorflow, Keras.

ImUs (creative programming) (2020)

Interactive artistic installation based on tracking the movements of people with computer vision technology based on Deep Learning.
The goal is to bring people not familiar with each other closer while experiencing the installation. In fact, as these people get closer, the music takes shape and volume, and a projection of the fusion of their faces (precedently captured) gradually appears.
Main software/tools employed: Python, adaptation of a preexisting neural network for people tracking, Processing (Java), Max/MSP.

Parallel (2018-2019)

A project aiming at the sensibilization on the environmental issue (pollution) through a journey based on interactive user interfaces and augmented reality.
Main software/tools employed: Javascript with library ar.js, HTML/CSS.

Gesture glove harmonizer (2018-2019)

Web app consisting of a harmonizer for MIDI keyboard. In particular, it is possible to generate customizable harmonics of the played notes in three different ways by moving a microcontroller called MicroBit (e.g., integrated on a glove). Moreover, it is possible to modify the ASDR parameters and the volumes.
Main software/tools employed: Javascript with library Node.js, HTML, MicroBit.

Certifications

Udemy

- Machine Learning A-Z: Hands-On Python in Data Science
- Deep Learning A-Z: Hands-On Artificial Neural Networks

Languages

Italian: mother language.
English: B2 (IELTS 6.5).