GUGLIELMO MENCHETTI

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EDUCATION

Master of Science in Computer Science GPA: 4.0/4.0 May 2020*
University of Illinois at Chicago, Chicago, IL (Current Location)
Relevant coursework: *Machine Learning, Neural Networks, Natural Language Procesing, OO Programming*

Master of Science in Computer Science and Engineering May 2020*
Politecnico di Milano, Milan, Italy
Relevant coursework: *Software Engineering, Data Mining, Recommender Systems, Artificial Intelligence*

Bachelor of Science in Computer Science and Engineering April 2017
Università di Firenze, Florence, Italy
Relevant coursework: *Computer Algorithms and Data Structures, Computer Architectures, Databases*

TECHNICAL SKILLS
* Expected graduation

Programming Languages	Python, C/C++, Java, Matlab
Frameworks & Libraries	PyTorch, Keras, Tensorflow, Scikit-Learn, NumPy, Pandas, OpenCV, Laravel
Certification	Deep Learning Specialization by deeplearning.ai (Coursera)

WORK EXPERIENCE

Graduate Student Researcher - *UIC* Jan 2019 - May 2020
- Worked under the supervision of Professor A. Cetin in collaboration with the University of Ankara
- Defined a new image representation for **protein sequences** based on auto-correlation
- Developed a **Convolutional Neural Network** for classifying proteins family based on the new representation
- Currently working on my Master thesis on **Facial Action Unit** recognition

Software Developer Intern (Machine Learning) - *eNursing llc* May - Aug 2019
- Designed a Facial Action Unit recognition model in **PyTorch** using **Convolutional** and **Recurrent Networks**
- Integrated the state-of-the art AU recognition model with medical patient videos for detecting pain
- Implemented a prototype user-interface using **PyQt** to record and analyze new videos

PROJECTS

TravlendarPlus - *Politecnico di Milano* Mar - Jul 2018
- Developed a calendar based application capable of providing mobility solutions
- Designed the back end using **Laravel** and integrated third party services (Google and Mapbox APIs)
- Produced extensive documentation such as **RASD**, **Design**, **Implementation** and **Testing documents**

Automatic Question Answering on Amazon Products - *UIC* Sep - Dec 2018
- Developed a deep neural network model for binary question answering on Amazon products
- Applied data exploration and cleaning using the **NLTK** library
- Deployed a **MySQL** database on **Amazon RDS** and developed the APIs
- Implemented a **Recurrent Neural Network** using **Keras** and **Tensorflow**

Music Recommendation System - *Politecnico di Milano* Jan - Mar 2018
- Group project aimed at developing a Recommender System for playlist continuation
- Implemented an ensemble of **Collaborative** and **Content based filtering** techniques using **Python**
- Achieved the **2nd position** in the class competition over 50 teams

ACTIVITIES AND AWARDS

Participant at **hackSAIC (Art & Technology Hackathon)** Apr 2019
- Created a 3D point-cloud representation of a room in a VR environment
- Project displayed at the annual Art & Technology exhibition at School of the Art Institute of Chicago

Recipient of the "**Best Double Degree Student Scholarship - UIC-PoliMi**" Jun 2018
- Scholarship granted by UIC for the double degree in collaboration with Politecnico Di Milano

PUBLICATIONS

2019 IEEE Global Conference on Signal and Information Processing (GlobalSIP) Nov 2019
G. Menchetti et al., "Pain Detection from Facial Videos Using Two-Stage Deep Learning,"