



Housseem ben mahfoudh

Phd student at UniGE

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Programming



OS Preference

GNU/Linux ★★★★★
Unix ★★★★★
MacOS ★★★★★
Windows ★★★★★

Experience

- 03/15 - Now **Research assistant**
Hepia, Geneva, Switzerland
Doctoral partner : Working on self organized services in sensornets
- 10/13 - 03/15 **Software Engineer**
Haute école arc, Neuchâtel, Switzerland
Design and development Internet of thing and mobile application, image processing and human-computer interaction. (Agile methodology)
- 02/13 - 06/13 **Internship**
Haute école arc, Neuchâtel, Switzerland
Design a web services and an android serious game for water resources management
- 06/12 - 08/12 **Internship**
Telnet Group, Sfax, Tunisia
Simulating an authorization server. The purpose of this internship is to master the technique of multithreading and sockets using JAVA/JAVA EE technology

Education

- 2015 - now **Phd Student**
University of Geneva, Switzerland
Keywords: Cloud computing, self organized systems, Internet of things
- 2013 - 2015 **Master's Degree in Computer Engineering**
University of Applied Science Western Switzerland (HES-SO), Switzerland
Master of science engineering
Main subjects: Cloud computing, Mobile Applications, Multimodal Processing, Data management, Software security, Parallel computing algorithms, Software engineering and architecture, Project management
Title of the Thesis: "Dynamic mobile mesh network for crowd sourcing"
- 2010 - 2013 **Computer engineering degree**
ENSI National school of computer sciences, Tunis, Tunisia
Main subjects: Network architecture, Operating system, Data base, Programming, Concurrent computing, Digital and Analogical Electronics, Introduction to finance.
Title of the Thesis: "Serious game for water resources management"
- 2008 - 2010 **Preparatory school**
Preparatory School for Engineering Studies, Sfax, Tunisia
Main subjects: Mathematics, Physics, Computer Science, chemistry

Personal Skills



Languages

French ★★★★★
English ★★★★★
Arabic ★★★★★
German ★★★★★

Project

09/15 - 02/16 **Indoor localization**

[Haute école arc, Neuchâtel, Switzerland](#)

Indoor localization using i Beacons and stabilizer algorithms. (e.g Trilateration, Kalman)

09/14 - 01/15 **Public light optimization**

[Haute école arc, Neuchâtel, Switzerland](#)

Management of public lighting from a motion detection application with the collaboration of stemys.io

<https://www.youtube.com/watch?v=v16BQx1zR9U>

02/14 - 06/14 **Kinect trackball**

[University of Applied Science Western Switzerland, Lausanne, Switzerland](#)

Implement a new interaction human machine using Kinect 2.0 https://www.youtube.com/watch?v=k2_ZXpZAYmk

02/14 - 06/14 **Gestures recognition application**

[University of Applied Science Western Switzerland, Lausanne, Switzerland](#)

Develop a gestures recognition application based on kinect and gyroscope measures using a supervised learning machine

10/13 - 05/14 **Automatic Augmented Reality Occlusion Detection System**

[Haute école arc, Neuchâtel, Switzerland](#)

A demonstrator was designed using Kinect V2 in order to allow people taking a look of their new denture using the augmented reality.

01/12 - 06/12 **Supervising network (SNMP protocol)**

[ENSI, Tunis, Tunisia](#)

Develop a network supervising application using JAVA EE technology and SNMP protocol.

<https://www.youtube.com/watch?v=oBD0yV9tFsU>

06/10 - 09/10 **3D Tetris game**

[ENSI, Tunis, Tunisia](#)

Develop a 3D Tetris game using C++ and OpenGL technologies

Publications

Haute école arc, Neuchâtel, Switzerland

Master thesis : Resources management in a crisis situation

Developing a dynamic crowd sourcing mobile network. The goal is to determine the characteristics of a crowd and implement a simulation module based on cognitive behavior and measure the crowd density. Data will be collected through a hierarchical dynamic mobile network based on cooperative functions.

<https://projets-labinfo.he-arc.ch/projects/gerec>