Fayez Lahoud

1007 Lausanne, Suisse fayez.me **EDUCATION** École Polytechnique Fédérale de Lausanne 2017 - Present Ph.D., Computer Science École Polytechnique Fédérale de Lausanne 2015 - 2017 M.S., Computer Science American University of Beirut 2009 - 2013 B.E., Computer and Communication Engineering Minor in Mathematics Dean's Honor List for 7 times RESEARCH American University of Beirut - Research Assistant 2012 **EXPERIENCE** • UI and Engine for data mining tweets by users and countries • Tweet analysis and sentiment prediction (calm, neutral, aggressive) Technologies: Java, Swing, Twitter API, REST Architecture 2012 - 2013 American University of Beirut - Final Year Project • Genetic algorithm for daily rides scheduling Android application for requesting rides and viewing routes • Best poster award at the FEA student and alumni conference Technologies: Java, Android, Google Maps API, Genetic Algorithms École Polytechnique Fédérale de Lausanne - Semester Project 2016 • Automated pipeline for digitizing archived paintings • Image processing and OCR for locating and reading information in scans • Barcode locating and reading for identifying paintings Technologies: Python, Anaconda, OpenCV, Tesseract, Image Processing École Polytechnique Fédérale de Lausanne - Semester Project 2016 • Local and global image enhancement based on keywords • Image feature extraction and comparison • Automatic enhancement based on comparison decision

PROFESSIONAL Murex Systems - Software Developer **EXPERIENCE**

Avenue de Cour 155

2012 - 2015

fayezlahoud@gmail.com

- Java Swing manipulation API for test developers
- Web templates for test reports and automated tools

Technologies: Python, Anaconda, Image descriptors, Tone mapping, Image enhancement

• Java-JavaScript bindings API in JavaFx Webview

Vidinoti SA - Software Developer

2016

- Image recognition and tracking using AGAST detectors and BRIEF descriptors
- NPM module development for automating descriptors calculation
- Mobile JavaScript library development for Augmented Reality applications

Technologies: JavaScript, RequireJS, NPM, Gulp, Python, Image processing

Sony Europe - Software Developer

2017

- Audio speech recognition using convolutional networks
- Visualizations for Sony's DNN Library
- Distributed resource management using Grid Engine

Technologies: C/C++, Cython, Python, DNN, NNabla, Open Grid Engine

PUBLICATIONS O. Dakroub, C. M. Boukhater, F. Lahoud, M. Awad, and H. Artail, An intelligent carpooling app for a green social solution to traffic and parking congestions, in Intelligent Transportation Systems (ITSC), 2013 16th International IEEE Conference on, 2013, pp. 24012408.

> C. M. Boukhater, O. Dakroub, F. Lahoud, M. Awad, and H. Artail, An intelligent and fair GA carpooling scheduler as a social solution for greener transportation, in Mediterranean Electrotechnical Conference (MELECON), 2014 17th IEEE, 2014, pp. 182186.

> F. Lahoud, M. S. Ortiz Segovia, B. Jin, and S. Ssstrunk, Keyword-Based image color re-rendering with semantic segmentation, in IEEE International Conference on Image Processing (ICIP), 2017, no. EPFL-CONF-231739.

LANGUAGES

English - French: Fluent Arabic: Mother-tongue

Spanish: Self-taught (B1 Level)

Traditional Chinese: Self-taught (HSK2 Level)