

RABII ELBEJI | RESUME

- » **Status:** R&D Engineer, 29 years old
- » **Prog. Languages:** Python, C++, Java, JS, Linux Shell
- » **Technologies:** TensorFlow, scikit-learn, OpenCV, Docker, Git
- » **Nat. Languages:** French, English



»» Experience

04/18 - Present **R&D Engineer | Lead Dev**

Open Bee™ · Nabeul, Tunisia

- » R&D around OCR, Computer Vision, NLP and Blockchain
- » Tesseract-based OCR optimization project with image pre-processing approaches and re-training engine with multiple languages.
- » Develop and optimize a barcode API (for detection and recognition) using image preprocessing and deep learning models.
- » R&D for administrative documents classification API based on machine learning algorithms.
- » Ethereum Smart-Contract and IOTA for document tracking.
- » DevOps tasks (Docker, CI/CD, Prometheus, Grafana, ELK Stack, ...)

Technologies: C++, Python, Java, Tesseract, OpenCV, Leptonica, TensorFlow, scikit-learn, Ethereum, IOTA, Docker

10/17 - 12/17 **Independent**

Tunisia

- » Develop a text detection and recognition API in real scenes.

Technologies: Python, TensorFlow, Transfer-Learning

01/16 - 09/17 **Software Engineer**

HOHWebSolutions · Mahdia, Tunisia

- » Build a website for managing data from different resources (Databases, Excel files).
- » Build website modules for a VOIP telephony System based on the Asterisk server.
- » PHP and NodeJS back-end servers for some modules.
- » DevOps Tasks (fail2ban, Prometheus, Grafana, ...)

Technologies: NodeJS, PHP, PHP Zend, Linux Shell

12/15 - 06/16 **Android App development Trainer**

IBIL Training Center · Sousse, Tunisia

Technologies: Java, PHP, Android-Studio

02/15 - 09/15 **Engineering degree project**

 ENIG ·  Gabes, Tunisia

- » Develop a real-time detection, classification, and tracking methods for red-edges road signs plus a comparative study with two other recent methods.
- » Perform 3D localization of panels using a stereo-vision sensors.
- » Develop a method for lane markings edges extraction based on the normalized cross correlation.

Technologies: Python, Scikit-Learn, Scikit-Image, NumPy, OpenCV

08/14 - 09/14 **Engineer Internship**

 ENIG ·  Gabes, Tunisia

- » Design and develop a quality of service (QoS) control tool for the supervision of the 2G / 3G network with administrative control.

Technologies: Java, Android, C#, PHP

02/14 - 04/14 **Final Year project**

 ENIG ·  Gabes, Tunisia

- » Develop a software tool for alphabet letters recognition based on the signs of the user's hand with the aim of helping the deaf-mutes people to learn faster and easier.

Technologies: C#, EmguCV, OpenCV Training Module

»» Education

2017 - Present **Ph.D. student**

 ENIT ·  Tunis, Tunisia

Specialty: Information technology (STIC)

2012 - 2015 **Engineering degree**

 ENIG ·  Gabes, Tunisia

Specialty: Networks & Communications

2010 - 2012 **Preparatory studies**

 ISSAT Mahdia ·  Mahdia, Tunisia

Specialty: Mathematics & Physics

2009 - 2010 **Bachelor Degree**

 Zeramdine High School ·  Monastire, Tunisia

Specialty: Experimental Sciences

»» Publications

21 July 2018 **ICDEc 2018**

 Brest, France

An Improved CNN Steganalysis Architecture Based on "Catalyst Kernels" and Transfer Learning.

Authors: Rabii El Beji, Marwa Saidi, Houcemeddine Hermassi, Rhouma Rhouma

01 juil 2016 **ICIAR 2016**

 Póvoa de Varzim, Portugal

A Comparative Study of Vision-Based Traffic Signs Recognition Methods.

Authors: Nadra Ben Romdhane, Hazar Mliki, Rabii El Beji, Mohamed Hammami

20 juin 2016

IEEE Intelligent Vehicles Symposium

📍 Gothenburg, Sweden

Combined 2d/3d Traffic Signs Recognition and Distance Estimation.

Authors: Nadra Ben Romdhane, Hazar Mliki, **Rabii El Beji**, Mohamed Hammami

