Francisco Rois

+1 (312) 804-6427 ● fjroissiso@gmail.com ● linkedin.com/in/franciscorois ● github.com/froissiso

SUMMARY

Engineer with knowledge in software, networks, wireless communications, electronics, management and entrepreneurship. Ability to adapt and to creatively solve complex problems proven through my extensive training and experience in different professional and cultural environments.

EDUCATION

2016 - 2017 **MASTER OF INFORMATION TECHNOLOGY AND MANAGEMENT (GPA 4.0/4.0)** Chicago, IL
Illinois Institute of Technology (IIT)
Specialization in IT Management and Entrepreneurship
Recognized with Outstanding Student Award
Courses: Business Innovation, IT Entrepreneurship, Java, Android, Telecoms Over Data Networks.

2015 - 2017 **MASTER IN TELECOMMUNICATIONS ENGINEERING (MET) (AV. GRADE: 9.03/10)** Barcelona, Spain
Telecom BCN (ETSETB Universitat Politècnica de Catalunya, UPC)
Dual Degree program with IIT
Member of BCN IEEE Student Branch
Courses: Telecommunications Systems, Communication Networks, Overlay Networks, Advanced Communications for Wireless Systems, Electronic Systems Design for Communications.

2014 - 2015 **ERASMUS+ EXCHANGE PROGRAM** Vienna, Austria
University of Applied Sciences Technikum Wien
Courses of Master's Degree in Telecommunications and Internet Technologies
Bachelor Thesis of Bachelor's Degree in Electronics and Business

2010 - 2015 **ENGINEERING DEGREE IN TELECOMMUNICATIONS TECHNOLOGIES** Vigo, Spain
University of Vigo
Specialty in Electronic Systems

SKILLS

Languages: Spanish (native), Galician (native), English (proficiency).
Technologies and tools: Java, JavaScript, Android, Arduino, Python, Node.js, Sails.js, html/css, version control (Git/GitHub), relational databases (MySQL), RESTful APIs, Internet protocols (TCP/IP, UDP, etc.), VoIP (SIP, RTP, SDP), WebRTC, wireless technologies (Bluetooth, Wifi, etc.), cloud services (AWS, Heroku), IoT.
Software: Sublime Text 2, Eclipse, Android Studio, Wireshark, Postman, Terminal.

EXPERIENCE

2016 - present **FULL STACK SOFTWARE ENGINEER @ IIT REAL-TIME COMMUNICATIONS LAB** Chicago, IL
BOSSA Platform: Bluetooth and Sensors Array. Indoor location and IoT.
Designed, created and tested central web application (BOSSA Platform) for the Indoor Location System:

- Support for sensors' atmosphere data (temperature and humidity) collection, storage and retrieval.
- System's resources availability through APIs.
- Indoor Location Server role, testing and deployment tools for the NG911 Indoor Location System.
- Standardization, security and control over internal interactions.
- Creation procedures and support for new infrastructures. Homogenization of processes and modularity.
- Platform built on scalable technologies.
- Website for documentation, publishing and internal operations (*https://api.iitrtclab.com*).

Technologies: Node.js, Sails.js, JavaScript, iBeacon, BLE, Android OS, WebRTC, MySQL, EJS, Bootstrap, Express.js, IoT.
Tools: Git/GitHub, Heroku, AWS (EC2, RDS, Route 53), NPM, Postman, Sublime Text 2, Terminal.

2016 - present **RESEARCH ASSISTANT @ IIT REAL-TIME COMMUNICATIONS LAB** Chicago, IL
Bluetooth Indoor Location for mobile phones calling for Emergency Services. NG911.

- Co-author of published paper (IPTComm 2017): *Dispatchable Indoor Location System for Mobile Phones based on a BlueTooth Low Energy Array.*
- Speaker at IIT Real-Time Communications Conference and Expo 2017. IPTComm track.
- Volunteer Resource Manager at IIT Real-Time Communications Conference and Expo 2017.

+1 (312) 804-6427 ● fjroissiso@gmail.com ● linkedin.com/in/franciscorois ● github.com/froissiso

| 2015 | **ENGINEER INTERN @ *MoonOff – Blusens.*** | Santiago de Compostela, Spain |

Consumer electronics and lightning solutions.

- Development of projects and quality control, methods and times in technical departments and R&D.
- Designed and implemented detailed process reports for light systems and electronics set up, which were used as model for assembly line.
- Collaborated in the department of product testing and validation, elaborating reports that determined exclusion or inclusion of products in the company's catalogue, and improving processes' efficiency.

PROJECTS

| 2017 | **TADHACK 2017** | Chicago, IL |

Telecom Application Development Hackathon.

- System for a new shopping experience, with voice and AI interaction.
- Skills: AWS, Amazon Echo Skills (AlexaPi), Raspberry Pi.

| 2017 | **KEEPMOVING PROJECT** | Chicago, IL |

System for gamification of physical activity (run and walk) and encouraging healthy habits.

- APP for mobile devices. Business plan and first stages of development.
- Skills: leadership, product management, business planning, teamwork, presentations.

| 2017 | **CAMPUS 1871** | Chicago, IL |

Entrepreneurship Hackathon hosted by 1871.

- Weekend-long event including crash courses, keynote speakers, mentorship and pitches.
- Created with a team a viable business model for a potential startup company.
- Skills: entrepreneurship, business planning, coaching, design, teamwork.

| 2016 | **ORDER APP PROJECT** | Chicago, IL |

System to order in bars and restaurants from mobile devices.

- Two complementary Android applications: Client APP and Bar APP.
- Skills: leadership, project management, teamwork, Android programming.

| 2016 | **MTP TELECOMMUNICATIONS PROJECT** | Barcelona, Spain |

Engineering competition in the framework of the course Management of Telecoms Projects.

- Designed from scratch and implemented two identical TX/RX modules able to transmit and receive a data file in a limited time. Team of seven engineers awarded with the second prize in the competition.
- Skills: teamwork, project planning, electronics design and manufacturing.

| 2015 | **OACC PLATFORM: ONLINE ACADEMIC CATALAN COMMUNITY** | Barcelona, Spain |

European BEST Engineering Competition.

- Case Study organized by the Board of European Students of Technology.
- Designed the concept for a unified platform used by the Universities in Catalonia.
- Team awarded with the third prize in the competition.
- Skills: teamwork, efficient problem solving, presentation in front of a jury and audience.

| 2015 | **DRONE TRICOPTER: DESIGN, BUILD AND TEST** | Barcelona, Spain |

IEEE Students Branch BCN.

- Multidisciplinary project, including electronics, robotics and software development.
- Skills: interdisciplinary collaboration, teamwork, engineering project management.

| 2014 - 2015 | **RFID SYSTEM FOR ASSETS MONITORING** | Vienna, Austria |

Bachelor Thesis in Electronics and Business Department.

- Designed and implemented a completely operating RFID tags reading system.
- Skills: Python and Arduino programming, RaspberryPi, electronics, research project development, project time planning, technical report elaboration, presentation in front of a jury and audience.

PERSONAL Drums player and music enthusiast, runner, cinephile, traveler, keen on new experiences and always willing to learn.