

Jamal Boussouf

+212 635 228 747 | jamalbssouf@gmail.com | [linkedin.com/jboussouf](https://www.linkedin.com/in/jboussouf) | github.com/jboussouf

EXPERIENCE

Overcoming Speech Recognition Challenges with GAN based Solutions

Nov 2022 – fev 2023

Nador University

FPN, MOROCCO

- Application of deep learning techniques to enhance speech recognition in different environments, including noisy conditions.
- Convolutional Neural Network (CNN) model achieved high accuracy in clean audio but struggled with increased noise levels.
- Attempted use of a simple autoencoder for noise removal led to a decline in classification performance, emphasizing the need for advanced denoising techniques.
- For more information: [github/Overcoming-Speech-Recognition-Challenges-with-GAN-based-Solutions](https://github.com/jboussouf/Overcoming-Speech-Recognition-Challenges-with-GAN-based-Solutions)

Elliptic Curve Cryptography

June 2022 – juil 2022

Nador University

FPN, MOROCCO

- Accelerating Elliptic Curve Algorithms: Testing Techniques for Enhanced Speed in ECDH and ECDSA
- Exploring Elliptic Curve Cryptography: PARI/GP Implementation for ECDH and ECDSA in Python
- Testing of several algorithms such as NAF, Window-NAF and other algorithms to verify the signing and verification speed of ECDSA.
- For more information: [github/Elliptic-Curve-Cryptography](https://github.com/jboussouf/Elliptic-Curve-Cryptography)

Secure P2P chat application using java

Feb 2022 – juil 2022

Nador University

FPN, MOROCCO

- Secure P2P Chat Application: Proposal for a secure chat application implemented in Java.
- System architecture resembles a complete and fully connected graph.
- Communication between nodes involves secure packet types.
- Secure P2P chat application in Java with decentralized network architecture, AES key exchange using RSA algorithm, and secure communication channels without a server.
- For more information: [github/Confidential-secure-and-optimal-communication-P2P](https://github.com/jboussouf/Confidential-secure-and-optimal-communication-P2P)

EDUCATION

Multidisciplinary Faculty of Mohammed Prime Nador

Master in Data Science and Intelligent System

Nador, MOROCCO

Aug. 2022 – current students

Multidisciplinary Faculty of Mohammed Prime Nador

Bachelor in Computer Science, Network and web system administration

Nador, MOROCCO

Aug. 2018 – May 2022

Farkhana College

Degree in Physical Sciences and Chemistry

Nador, MOROCCO

Aug. 2015 – May 2018

Information Technology Support Specialist

Sep. 2018 – Present

Southwestern University

Georgetown, TX

- Communicate with managers to set up campus computers used on campus
- Assess and troubleshoot computer problems brought by students, faculty and staff
- Maintain upkeep of computers, classroom equipment, and 200 printers across campus

Artificial Intelligence Research Assistant

May 2019 – July 2019

Southwestern University

Georgetown, TX

- Explored methods to generate video game dungeons based off of *The Legend of Zelda*
- Developed a game in Java to test the generated dungeons
- Contributed 50K+ lines of code to an established codebase via Git
- Conducted a human subject study to determine which video game dungeon generation technique is enjoyable
- Wrote an 8-page paper and gave multiple presentations on-campus
- Presented virtually to the World Conference on Computational Intelligence

PROJECTS

Gitlytics | *Python, Flask, React, PostgreSQL, Docker*

June 2020 – Present

- Developed a full-stack web application using with Flask serving a REST API with React as the frontend
- Implemented GitHub OAuth to get data from user's repositories
- Visualized GitHub data to show collaboration
- Used Celery and Redis for asynchronous tasks

Simple Paintball | *Spigot API, Java, Maven, TravisCI, Git*

May 2018 – May 2020

- Developed a Minecraft server plugin to entertain kids during free time for a previous job
- Published plugin to websites gaining 2K+ downloads and an average 4.5/5-star review
- Implemented continuous delivery using TravisCI to build the plugin upon new a release
- Collaborated with Minecraft server administrators to suggest features and get feedback about the plugin

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL (Postgres), JavaScript, HTML/CSS, R

Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI

Developer Tools: Git, Docker, TravisCI, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

Libraries: pandas, NumPy, Matplotlib