COMPUTER ENGINEERING

BOUZERARA Yacine

Computer Science Student

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🪪 Driving License

EXPERIENCES

Mobile Development Intern

Medical Office | Algeria | January 2025 - April 2025

- Designed and developed a cross-platform appointment booking application for patients.
- Technologies used: Flutter (front-end) and Python (back-end).

SOC Analyst Intern

ITrust | Toulouse | January 2024 - April 2024

- Supervised the network infrastructure of multiple client organizations
- Identified, analyzed, and assessed security events
- Reported security incidents and provided immediate recommendations for mitigation
- Assisted in incident response and resolution processes
- Contributed to the implementation of detection services (SIEM, EDR, etc.)
- Participated in the development and maintenance of event correlation rules
- Contributed to continuous threat intelligence and monitoring efforts

Full Stack Developer Intern

Teletic | Algeria | April 2023 - June 2023

- Development of a platform for managing electronic payment terminals
- Project planning and design using UML diagrams
- Implementation of core functionalities: CRUD operations, Authentication system with advanced encryption (JSON Web Token), Separate sessions for different user roles, File upload and transfer, Integration of location tracking on a map, Technologies Used: Spring Boot, Spring Security, Angular

PROJECTS

Employee Attrition Prediction in Healthcare

- Develop AI models to identify the reasons for employee turnover in the hospital center
- Perform data preprocessing (Data Wrangling)
- Ensure compliance with ethical considerations
- Train various models, including linear regression, logistic regression, perceptron, decision tree, and random forest
- Implement strategies to mitigate overfitting and underfitting

Vehicle Routing Problem

- Determine the optimal algorithm to traverse all required cities
- Ability to solve large instances (several thousand cities)
- Prove the complexity of the problem based on Hamiltonian or Eulerian cycles
- Constraints: Traffic and truck capacity
- Algorithms: Ant Colony, Genetic, Clark and Wright

Chatbot BERT Intent Classification

- Designed and implemented an AI chatbot
- using BERT for precise intent classification
- and GloVe-LSTM for sentiment analysis
- Achieved enhanced customer input
- understanding and delivered personalized
- responses to improve user satisfaction
- Tools: TensorFlow, Hugging Face, Keras,
- NLTK
- Models: BERT, GloVe-LSTM

OCR Text Recognition System with Tesseract and OpenCV

- Designed and implemented an optical
- character recognition (OCR) system to
- extract and overlay text on images
- Optimized accuracy through preprocessing
- techniques (grayscale, image enhancement)
- Tools: OpenCV, PyTesseract

EDUCATION

CESI Graduate School of Engineering

Engineering School | Toulouse | Septembre 2023 - July 2027

- PBL Pedagogy (Problem-Based Learning)
- Project Management: Red Line project for each module
- Team Management: Supervision and task allocation among team members under the direction of a project manager
- Independent work: PBL is based on self-directed learning, with supervision and guidance from mentors and instructors.
- Engineering Cycle (English Class) 2023 - 2026
- Degree Obtained: Computer Developer Integrated
- Preparatory Cycle 2021 - 2023

LANGUAGES

- English B2 (Fluent)
- French (Native)
- Arabic (Native)

SKILLS

Programming Languages

- C++, Python, SQL, FLUTTER

PYTHON LIBRARIES & TOOLS

- SCIKIT-LEARN
- TensorFlow
- Keras
- Hugging Face
- NLTK
- PyTesseract
- OpenCV

CERTIFICATIONS & COURSES

- 100 Days of Code: The Complete Python Pro Bootcamp
- Supervised Machine Learning: Regression and Classification
- Advanced Learning Algorithms
- Unsupervised Learning, Recommenders,Reinforcement Learning

SOFTWARE

- Visual Studio / Visuat Studio Code
- Intellij / Pycharm / Jupiter NoteBook
- Git / Git Hub
- Power Bi
- Talend

SOFT SKILLS

- Communication
- interculturality
- Adaptability
- Problem-solving
- Teamwork

INTERESTS

- Sports (Weightlifting, Swimming)
- Creating Automation Scripts
- Participating in Hackathons
- Traveling