

BASSEL-ABDESSAMAD GRINE

📍 Shenzhen, China

📞 +86 19915504212

✉️ grineabdessamed2003@gmail.com

👤 github.com/Abdou-root

EDUCATION

Harbin Institute of Technology (HIT)

Master of Science in Computer Science

Shenzhen, China

September 2025 – Present

Sichuan University

Bachelor of Science in Software Engineering

Chengdu, China

Aug 2021 – June 2025

GPA: 3.7/4.0

Relevant Coursework: Data Structures & Algorithms, Deep Learning, Operating Systems, Applied Linear Algebra, Database Management Systems.

TECHNICAL SKILLS

Languages: Python, C++, JavaScript, TypeScript, SQL

AI & Machine Learning: PyTorch, TensorFlow, Keras, YOLOv8, MedSAM, OpenCV, Pandas, NumPy

Web Development: React.js, Node.js, Express, Flask, MongoDB, HTML/CSS

DevOps & Tools: Spark, Hadoop, Docker, AWS, Git, Jira, Linux/WSL, MySQL, PostgreSQL

PROFESSIONAL EXPERIENCE

Suncaper, Ltd

Big Data Intern

Chengdu, China

March 2024 – May 2024

- Engineered data processing pipelines using Spark and Hadoop to analyze and manage large-scale datasets, improving data retrieval efficiency.
- Developed and optimized Python automation scripts for handling real-world datasets and integrating with MySQL databases.
- Collaborated with multidisciplinary teams to implement backend solutions and effectively communicated project outcomes to stakeholders.

KEY PROJECTS & RESEARCH

Brain Tumor Segmentation & Detection | Python, PyTorch, MedSAM, YOLO

Designed and implemented a deep-learning pipeline for automatic segmentation and detection of brain tumors (glioma, meningioma, pituitary) using T1-weighted MRI data.

Evaluated and benchmarked architectures including SegNet, Attention UNet, and MedSAM (v1 & v2).

Developed custom scripts for data preprocessing, augmentation, and evaluation (Dice score, metric curves).

WisdomBytes (Full Stack Platform) | React, Node.js, Express, MongoDB

Built a complete MERN stack blogging platform featuring secure user authentication and dynamic content management.

Designed a RESTful API to handle CRUD operations and managed database schemas using MongoDB.

Email Spam Classification | Python, TensorFlow, LSTM

Developed an Email Spam Classification system using an LSTM Sequential Model to detect spam with high accuracy.

Utilized NLP techniques for text preprocessing and feature extraction.

ChessAI Engine | Python, Algorithms

Programmed a custom Chess Engine incorporating AI opponents with varying difficulty levels.

Implemented game logic and decision-making algorithms for human-vs-AI gameplay.

Tastify | Python, Flask, MySQL, Streamlit

Created a data analysis tool providing insights and recommendations based on Yelp's restaurant datasets.

Implemented Logistic Regression models to predict trends and visualized results using Streamlit.

ADDITIONAL

Languages: English (Fluent), Chinese (Intermediate), French/Arabic (Native/Fluent), German (Intermediate)
Certifications/Other: Strong background in Machine Learning and Data Structures.