

# BASSEL-ABDESSAMAD GRINE

📍 Shenzhen, China

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## 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.