Gaser Zaghloul Hassan

Computer Engineering Student

Cairo, Egypt | +201554637366 | gaser.zaghlol1@gmail.com | [Linkedin-gaser zaghloul](#) | [GitHub-gaser zaghloul](#)

Education

Ain Shams University

Bachelor of Engineering – Computer Engineering and Software Systems Department.   Sep 2021 – Jun 2026

Skills

- **Programming Languages:** C/C++, Python, Java, SQL, JavaScript
- **Programming Concepts:** OOP, Data Structures, Algorithms
- **AI/ML/DL:** Scikit-learn, TensorFlow, Keras, PyTorch
- **Tools:** OpenCV, Pillow, Matplotlib, Pandas, NumPy, Selenium, JIRA
- **Techniques:** Regression, Classification, Clustering, ANN, CNN, RNN
- **Testing:** Manual, Automation, Functional, Bug Tracking
- **Web:** HTML, CSS, JS, Flask, Django, Node.js
- **Hardware:** Verilog, Embedded C, FreeRTOS, Arduino, Robotics

Experience

Machine Learning Internship   Feb 2025 – Mar 2025

Cellula Technologies, Cairo, Egypt

[Recommendation & Project Letter](#)

- Completed **end-to-end** deployment of two ML projects (Flask & Django)
- Conducted EDA, model development, and evaluation on real datasets

Software Testing Internship   Aug 2024 – Sep 2024

Edges For Training, Cairo, Egypt

- Performed manual and automated testing for web and mobile apps
- Reported bugs using **JIRA** and analyzed usability issues
- Collaborated with senior testers to implement best practices

AI Diploma   Jun 2024 – Nov 2024

Instant, Cairo, Egypt

- Built ML&DL models and applied concepts to real-world datasets
- Delivered AI projects including image classification and forecasting
- Delivered multiple AI projects, showcasing expertise in
  Handling large datasets and creating data pipelines for scalable AI solutions.

AI Internship at WE   Aug 2023 – Sep 2023

We, Cairo, Egypt   [GitHub Repo](#)

- Gained foundational knowledge in Machine Learning (ML), Data Science, and Deep Learning.
- Built **a traffic monitoring system** using Deep Learning and Mask R-CNN
- Gained exposure to TensorFlow, Keras, and CV tasks

Robotics Internship   Feb 2023 – Mar 2023

St-Smart, Cairo, Egypt

- Developed Smart Home systems using **Arduino** and **sensors**
- Designed a Bluetooth-controlled lamp and obstacle-avoiding car

Projects

Sports Image Classification Using CNN   [GitHub Repo](#)

- **Technologies:** Python, TensorFlow, Keras, OpenCV, Scikit-learn, PCA, Flask
- Applied **data augmentation (×3)** using flips, rotations, and brightness shifts to increase robustness.
- Trained with early stopping and evaluated using confusion matrix and accuracy curves.
- Achieved **98.34% validation accuracy** on a set of 4,937 images out of 24,681 total.
- **Deployed model using Flask** for real-time predictions via a web interface.

Distributed Web Crawler and Indexer   [GitHub Repo](#)

- **Technologies:** Python, Flask, BeautifulSoup, Whoosh, AWS SQS, AWS EC2
- Designed and deployed a **fault-tolerant distributed system** that crawls websites, indexes their content, and enables keyword-based search through a Flask web interface.
- Leveraged **AWS SQS** as a distributed queue system and **EC2 instances** for running crawler/indexer components across the cloud.

Face Attendance System   [GitHub Repo](#)

- **Technologies**: Python, OpenCV, face_recognition
- Developed a real-time facial recognition system for automated attendance tracking using a webcam.
- Achieved over **95% recognition accuracy**, dynamically adding new faces with efficient CSV logging

Hotel Reservation Classification   [GitHub Repo](#)

- **Technologies:** Python, Flask, Matplotlib, Seaborn, Scikit-learn
- Built and deployed a machine learning model to classify hotel reservations based on booking behaviour and cancellation risk.
- Deployed the model via a Flask web app, achieving **89% prediction accuracy**

Uber Fare Prediction   [GitHub Repo](#)

- **Technologies:** Python, Django, Matplotlib, Seaborn, Scikit-learn
- Designed and deployed a fare prediction system using historical Uber ride data.
- Integrated the model into a Django web app, resulting in a **15% improvement in RMSE** compared to baseline models.

Heart Failure Prediction   [GitHub Repo](#)

- **Technologies:** Python, Scikit-learn, Matplotlib, PCA
- Developed a predictive model to assess heart failure risk using clinical and demographic data.
- Conducted data pre-processing, dimensionality reduction (PCA), and model evaluation.
- Achieved **92% classification accuracy** with optimized hyperparameters.

Snake Game   [GitHub Repo](#)

- **Technologies:** C++, OOP, Data Structures
- Built a fully functional Snake Game applying OOP and Data Structures concepts.
- Designed dynamic GUI for real-time interaction, including scoring, collision detection, and increasing game difficulty.

Bagséa E-Commerce Website   GitHub Repo

- **Technologies:** HTML, CSS, JavaScript, Bootstrap, Node.js, Express, MongoDB, JWT
- Implemented **JWT-based authentication** with bcrypt-secured passwords and protected routes for user-specific features.
- Built dynamic product catalog, **cart management**, and full checkout system with shipping, tax, and order history tracking.
- Created **Admin Panel** for product and user management, including real-time inventory updates and order control.

BrandGeeks E-Commerce Website   GitHub Repo

- **Technologies:** HTML, CSS, JavaScript, Bootstrap , Django
- Developed a full-stack e-commerce platform featuring user authentication, product browsing, and shopping cart functionality.
- Implemented a responsive design and server-side data management for products and orders.

ATM Machine   GitHub Repo

- **Technologies:** C++, Verilog
- Simulated an ATM system combining hardware design (Verilog) and software (C++) for a full user interaction model.
- Built and tested account authentication, balance operations, and error handling.