



**SAAD KATAR**

**JUNIOR SOFTWARE ENGINEER**

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Saad Katar | LinkedIn

<https://github.com/KatarSaad>

Exemplary in designing, developing, and maintaining cutting-edge software solutions. Passionate about comprehending software project ecosystems and eager to apply expertise in programming, Back End(ASP.NET), Front End(React) AI, cloud computing, DevOps, unit testing, and Software Architecture within Agile environments.

## EXPERIENCE

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### Internship at ATI (Tunisian Internet Agency) Feburary 2023 - Juin 2023

- Architected and implemented an advanced Intranet solution, enhancing productivity and achieving time savings.
- The system features a chat service, bug/task management system, and intuitive interfaces for blogs, articles, and news.
- Demonstrated proficiency in data extraction & reporting from Sage ERP.
- Key Skills: ASP.NET, React, Git, Agile Scrum, Domain-driven Design, JWT Authentication, Authorization, Software Architecture

### Software Engineering Intern at 3Dwave | June 2022 - August 2022

- Developed an AI application with Flutter targeting Autism and anxiety in children.
- Key Skills: Flutter, AI, Computer Vision, Git, Flask, MediaPipe

### Software Engineering Intern at the University Hospital of Farhat Hached | February 2022 - May 2022

- Architected, implemented, and maintained a QR code Access and Disease Prediction solution.
- Key Skills: Flutter, Firebase, AI, Algorithms, Flask, TensorFlow

## PERSONAL PROJECTS

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### Advanced Computer Vision Projects using Python, OpenCV, and MediaPipe:

- **Developed a Face Detection system with unique applications:**
  - Blink Detection App: Counts user's eye blinks, showcasing proficiency in biometrics.
  - Emotion Detection App: Capable of identifying 9 distinct emotions, demonstrating a strong understanding of machine learning algorithms.
- **Created an innovative Hand Gesture system:**
  - Developed a paint application and a volume control system operated entirely through hand gestures.
- Utilized Pose Estimation to design an AI Personal Trainer that accurately counts exercise reps such as curls and push-ups.

### Web Development Projects:

- **React:**
  - Developed a comprehensive Bug/Task Management System, improving workflow efficiency.
  - Created an Airbnb Clone and TODO application, showcasing proficiency in mimicking complex web services.
- **Spring Boot:**
  - Implemented a CRUD application for efficient management of products and categories.
- **ASP.NET:**
  - Architected a bug/task management system, a chat service, and an articles management service.

### Skills Summary:

- Proficient in: Python, Flask, OpenCV, Git, Machine Learning, Algorithms, ASP.NET, Domain-Driven Design, Java, React, APIs.
- Well-versed in: Design Patterns, Software Architecture.

# SKILLS & PROFICIENCIES

## TECHNICAL SKILLS

- **Programming & Algorithms:** Proficient in advanced algorithms and data structures, forming a solid foundation in computer science principles.
- **Artificial Intelligence:** Experience with AI and neural networks, specifically in computer vision. Skilled in Python, MediaPipe, and OpenCV.
- **Internet of Things & Big Data:** Practical understanding of IoT concepts with experience in Big Data processing using Hadoop and Power BI for data visualization.
- **Mobile Development:** Proficient in mobile application development using Flutter, Dart, and Swift for both Android and iOS.
- **Front End Development:** Skilled in JavaScript, HTML, CSS, and React. Experience in developing ERP systems.
- **Back End Development:** Expertise in back-end technologies including Firebase, Spring Boot, and ASP.NET, utilizing languages such as Java, C#, C/C++. Strong understanding of OOP principles and SQL, with hands-on experience on Linux.
- **Cloud Computing & DevOps:** Proficient in cloud computing technologies with AWS, Docker, and mastery of DevOps principles including unit testing, continuous integration with Git. Experience working in Agile and Scrum methodologies.
- **Software Architecture & Design:** Solid understanding of software architecture, UML, and design patterns.
- **Soft Skills:** Proven problem-solving skills, critical thinking, creativity, and excellent communication. Strong leadership and teamwork abilities, emotional intelligence, and adaptability;

## EDUCATION

Degree in Software Engineering EPI Sousse, 2018 - 2023 GPA: 3.0/4.0

### Key Competencies:

- **Computer Science Fundamentals:** Proficient in Algorithms, Data Structures, and Graph Theory.
- **Software Development:** Experience in OOP, Front-End (React), Back-End (ASP.NET), and Mobile Development (Flutter).
- **Artificial Intelligence:** Knowledge of AI paradigms and Neural Networks.
- **Cloud & DevOps:** Practical experience with Cloud platforms, Docker, and DevOps principles, including unit testing and continuous integration.
- **Design:** Proficient in Design Patterns, UML, Agile methodologies, and Scrum framework.
- **Big Data & IoT:** Familiarity with Big Data processing (Hadoop) and IoT concepts.
- **ERP Systems:** Hands-on experience with enterprise resource planning systems.
- **Programming Languages:** Proficient in C, C++, C#, Java, JavaScript, Python, Dart, and PHP.
- **Data Visualization:** Skilled in transforming data into insightful visuals using Power BI.

## SOFT SKILLS

Strong problem-solving, critical thinking, creativity, and communication skills. Experienced in leadership, teamwork, emotional intelligence, and adaptability. Demonstrated resilience and attention to detail, coupled with effective time management, decision-making, and conflict resolution abilities. Proficient in negotiation and project management.

## CERTIFICATES

- Cisco CCNA1
- Huawei HCIA
- Microsoft Dynamics 365 Erp Fundamentals



## ACTIVITIES

- **Scouting:** Active participation in various scouting activities, developing leadership and teamwork skills.
- **Hiking:** Regular hiking activity to maintain physical fitness and mental health.
- **Freediving:** Practicing freediving to develop discipline and self-control.
- **Competitive Programming:** Participating in programming competitions to strengthen technical skills and problem-solving abilities.
- **Writing:** Writing technical blogs or articles, enhancing written communication skills.
- **Reading:** Regularly reading technical and personal development books to continue learning and growing.
- **Debate Club:** Participation in a debate club to develop communication and argumentation skills.