

Dr. Nabila Abdessaied

Software Engineer



✉ nabila.abdessaied@gmail.com

☎ +44 734 2182372

📍 London, UK

Professional Experiences

Jan. 2022 - present: SOFTWARE ENGINEER

Microsoft, London, United Kingdom.

- Led the extension and integration of the 5G core end-to-end solution testing framework to validate the Subscriber Data Management solution. This framework is crucial in the early detection and resolution of potential issues and bugs, thereby improving the overall quality of the Subscriber Data Management solution.
- Owned features that improved the availability and scalability of the Mobile Voicemail solution by leveraging Azure technologies, such as the *On-demand Capacity Reservation* and the *VM Scale Sets*.
- Enabled the live configuration of the Mobile Voicemail deployment resulting in a significant time saving of 20 minutes for operators, as it eliminated the need for the redeployment.
- Proposed and championed CI enhancement features that automate previously manual and repetitive workflows. This has streamlined both the deployment and testing processes, resulting in a time saving of 30 minutes per developer.

Sept. 2016 - Dec. 2021: SOFTWARE ENGINEER

Infineon Technologies AG, Munich, Germany.

- Took ownership of the design and implementation of a Groovy shared library that encapsulates essential functionalities for embedded software pipelines in Jenkins. This library has been adopted by the majority of software teams at Infineon, streamlining their development processes.
- Co-directed the Infineon CI community, taking charge of organizing, moderating, and managing meetings. I provided the latest CI updates, invited speakers, and coordinated Hackathons.
- Boosted the developer productivity by designing and developing standard Docker images that offers software teams a platform which integrates tools, methods, and best practices to perform software development tasks.
- Contributed to the design, development, and unit testing of embedded software.

Nov. 2013 - July 2016: RESEARCH & DEVELOPMENT ENGINEER

German Research Center for Artificial Intelligence (DFKI), Bremen, Germany

- Automated the translation of natural language assertions into System Verilog Assertions using natural language processing tools.
- Developed a requirements quality assessment method using natural language processing and machine learning techniques.
- Published a book chapter and two international conference papers in the area.

Jan. 2012 - Dec. 2015: RESEARCH & DEVELOPMENT ENGINEER

Institute of Computer Science at University of Bremen, Germany

- Optimization and complexity analysis of reversible and quantum circuits.
- Published a book and several papers in the area, including journal articles in *Theoretical Computer Science* and *Information Processing Letters*.

Sept. 2009 - Dec. 2011: UNIVERSITY TUTOR

Institute of Computer Science of Ariana, Tunisia.

Teaching and supervising students at university.

Modules: *Operating systems, databases, C, algorithms and data structures.*

Nov. 2007 - Dec. 2008: SOFTWARE ENGINEER

EREAIT: Italian company, based in Tunis, Tunisia.

Implementation of software and web applications focused on tax and salary management.

Studies

2012 - 2015: PHD IN COMPUTER SCIENCE

Topic: Reversible logic and quantum computing.

University of Bremen, Germany.

2007 - 2009: MASTERS IN COMPUTER SCIENCE

Topic: Micro-electronic embedded systems.

National Engineering School of Sousse, Tunisia.


2002 - 2007: DIPL.ING. IN COMPUTER SCIENCE


Topic: Networks and distributed systems.


University of Sciences of Tunis, Tunisia.

Licenses and Certifications

 **Moving from Developer to Eng. Manager**
LinkedIn Learning, *Jun 2021*

 **Software Design and Architecture**
University of Alberta - Coursera, *Aug 2020*

 **Data Structures and Algorithms**
University of California - Coursera, *Nov 2020*

 **Functional Safety certificate in ISO 26262**
TÜV SÜD, *Oct 2018*

Volunteer Experience

Nov. 2018 - present: Active member in a charity organisation supporting children with disabilities in Tunisia by funding their education and health intuitions
TunisAid e.V. , Munich, Germany

Oct. 2017 - Feb.2018: Arabic teacher for the Arabic community based in Munich.
Zahr Aljasmin school, Munich, Germany

Oct. 2014 - Oct. 2015: Observer in a national electoral observation network organization participating in the Tunisian parliamentary and presidential elections for Tunisians in Germany
Mourakiboun, Tunis, Tunisia.

Skills

- **DevOps & CI/CD:** Docker, Jenkins, GitLab, Azure DevOps Services.
- **Infrastructure as code (IaC):** Terraform, Azure Resource Manager (ARM).
- **Cloud Computing Platform:** Microsoft Azure.
- **DBMS:** Oracle, MySQL, SQL Server.
- **Container Orchestration:** Kubernetes, Helm, Azure Bicep.
- **Analysis/Monitoring:** Grafana, SonarQube.
- **NLP:** Stanford CoreNLP library.
- **Agile framework:** Scrum, Kanban.
- **Agile project management:** Jira, Azure Boards.
- **Programming Languages:** C/C++, Python, Groovy, Java, Shell.
- **Code Analysis:** ISO26262 guidelines, Misra C 2012, PC-Lint, Polyspace.
- **IDE:** VSCode, Eclipse, IntelliJ, PyCharm.
- **Build systems:** Make, CMake.
- **Revision control systems:** ADO, Bitbucket, Git, SVN, Gerrit.
- **Unit testing:** Ceedling, Unity, PyTest.
- **Code coverage:** Gcov, Python Coverage.
- **ML tools:** Weka.
- **AI tools:** Copilot, OpenAI.
- **Editors:** TeX/LaTeX, Microsoft Office.

Languages

- **Arabic:** Native language
- **English:** C2 proficient level
- **French:** C2 proficient level
- **German:** B2 upper intermediate level