## About Albarqouni Lab

**Albarqouni Lab,** established in 2020 and located at the Clinic for Diagnostic and Interventional Radiology, University Hospital Bonn, University of Bonn and Helmholtz AI, aims to develop the next generation of AI in Medicine, specifically computational imaging algorithms with a particular focus on artificial intelligence (AI) and machine learning (ML) models to improve the clinical workflow for patients, radiologists, and healthcare professionals. The lab is affiliated with the Munich School for Data Science (MUDS), the Medical Imaging Centre Bonn (MIB), and the European Laboratory for Learning and Intelligent Systems (ELLIS). The research at the Albarqouni Lab focuses on three main areas: computational medical imaging, federated learning in healthcare, and affordable AI and healthcare. For further details, visit https://albarqouni.github.io/

## Instructions

### Accommodation

**Accommodations will be organized for invited speakers and guests at the Golden Tulip El Mechtel,** Tunis, Tunisia.

**Venue:**
● **Golden Tulip El Mechtel**, Tunis, Tunisia — Conference Room: Diamond (9th floor)

● Convenient access via **Tunis–Carthage International Airport** (≈8km / 15minutes by car). Taxis & ride- hailing services (Bolt, Uber) are readily available.

**Transportation:** A shuttle bus will be provided by the hotel for our international guests from/to the Carthage Airport.

**Catering:**
For our guests, the daily breakfast is included in your accommodation at the **Golden Tulip El Mechtel.** For the participants, Coffee/Tea,/Drinks are offered twice daily during the Summer school. Warm lunch will be provided during the lunch breaks.

**Dress code:**
While there isn't a mandatory dress code, we encourage participants to choose from the following options: Casual or Smart Casual.

**Weather in Tunis:**
Expect **hot, sunny** conditions this week, with highs ranging from **28°C to 30°C** and nighttime lows between 23°C and 24°C, with very little rainfall and plenty of sunshine.
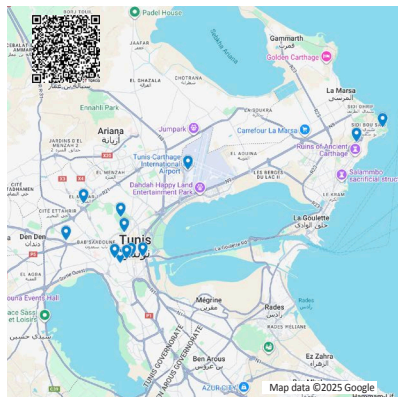
### Hotel Parking
At **Golden Tulip El Mechtel, free on-site parking** is available, with designated secure and guarded areas. However, availability can sometimes be limited.

### Hotel Wi-Fi
The **Golden Tulip El Mechtel** offers **complimentary high-speed WiFi** throughout the property – simply use the Golden Tulip WiFi (no password is required).

### Shopping and attractions:

Discover Tunis's vibrant shopping scene along **Avenue Habib Bourguiba,** where you'll find a mix of boutiques, international brands, and traditional Tunisian stores. For a more authentic experience, stroll through the **Medina of Tunis** (UNESCO World Heritage site), where souks overflow with handicrafts, spices, textiles, and jewelry—perfect for unique souvenirs. Modern malls like **Tunis City Mall** and **Carrefour La Marsa** also offer familiar global retailers, open daily from 10 am to 9 pm (note: some smaller shops may close on Sundays). After shopping, immerse yourself in Tunisian culture by visiting the **Bardo National Museum,** home to one of the world's richest collections of Roman mosaics, or exploring the picturesque coastal village of **Sidi Bou Said,** famous for its white-and-blue houses and sea views. A few attractions were added to the map on the flyer (just scan the QR code).

### Local trips to city highlights:

● **Tunis Clock Tower:** ~3.5 km (10 min)
● **University of Tunis El Manar:** ~5 km (10 min)
● **Medina of Tunis:** ~3 km (10 min)
● **Bardo National Museum:** ~7 km (15 min)

### Sidi Bou Said / Carthage

**Sidi Bou Said** offers a picturesque escape with white-and-blue houses, cobbled streets, seaside views, and the famous Café des Délices. Nearby, **Carthage** showcases Tunisia's rich history through its UNESCO-listed ruins, including the Antonine Baths, Punic harbors, and the Carthage Museum.

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Welcome/Willkommen/أهلاً وسهلاً to the 1st Edition of the Arab-German

# Summer School on Biomedical Imaging with Deep Learning (BILD)

**Tunis, Tunisia,
1-5 September
2025**

FOR MORE INFO

## Join us for an enriching 5 day educational experience:

**BILD 2025 – Biomedical Imaging with Deep Learning** will take place from **1–5 September 2025 in Tunis, Tunisia,** under the umbrella of the **SANAD Network** for Affordable and Democratized AI in Healthcare. This year's edition is organized by the **Albarqouni Lab** at the **University Hospital Bonn** and the **University of Bonn,** in collaboration with the **Lebanese American University, University of Tunis El Manar,** and **Duhok Polytechnic University.** Over five intensive days, participants from **Germany, Lebanon, Tunisia, and Iraq** will engage in expert lectures, hands-on labs, and collaborative case studies to tackle real-world challenges in medical imaging using deep learning. Apply now and be part of an international effort to advance accessible AI for healthcare. For more details visit: **bild2025.github.io**

The Summer School on Biomedical Imaging with Deep Learning **(BILD)** , is funded by the **DAAD** with funds from the **Federal Foreign Office.**

Federal Foreign Office

DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

# AGENDA
## Summer School on Biomedical Imaging with Deep Learning

**BILD** Summer School
Tunis, Tunisia
Organized by Albarqouni Lab., Uni-Bonn, Germany

| | TUESDAY 02.09 | WEDNSDAY 03.09 | THURSDAY 04.09 | FRIDAY 05.09 |
|---|---|---|---|---|
| 09:00 - 10:30 | Welcome Note / Keynote Speech Prof. Nassir Navab | Medical Image Segmentation Dr. Aditya Rastogi | Graph Intelligence Asso. Prof. Islem Rekik | Excursion |
| 10:30 - 11:00 | Coffee break | Coffee break | Coffee break | |
| 11:00 - 12:30 | DL Fundamentals Prof. Shadi Albarqouni | Uncertainty Estimation Prof. Vasileios Belagiannis | Vision Language Models | |
| 12:30 - 13:00 | Prof. Ezzeddine Zagrouba | Prof. Hanen Boussi | Dr. Naries Ben ameur | |
| 13:00 - 14:30 | Lunch break / Networking | Lunch break / Networking | Lunch break / Networking | |
| 14:30 - 16:00 | Hands-on Session Pre-processing Data + Dataloder | Hands-on Session Segmentation | Hands-on Session Medical AI Dev. with MONAI - NVIDIA Dr.Rached Abdelkhalak | |
| 16:00 - 16:30 | Coffee break | Coffee break | Coffee break | |
| 16:30 - 18:00 | Hands-on Session CNN Classification | Hands-on Session Quality Control | Hands-on Session Medical AI App Dev. Dr.Lara Reimer | |
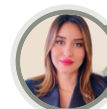
An excursion to **Sidi Bou Said** and **Carthage** which was founded in the 9th century B.C. on the **Gulf of Tunis,** grew into a major Mediterranean trading empire and a center of a thriving civilization

Keynote · Lecture · Hands-on Training

## Organizers

**Shadi Albarqouni**
Professor of Computational Medical Imaging Research at **Universitätsklinikum Bonn** and **University of Bonn** | AI Young Investigator Group Leader at Helmholtz AI, Germany

**Monia Najar**
Professor of Computer Science and Vice-rector for International Cooperation and Strategic Directions at the **University of Tunis El Manar (UTM)**, Tunis, Tunisia

**Bareen Haval**
Head of Cooperation and Coordination at the International Relations office at the **Duhok Polytechnic University (DPU),** Duhok, Iraq

**Hussein Hassan**
Professor of Food Science & Technology at the **Lebanese American University (LAU)**, Beirut, Lebanon