Doron Gusenberg 050-5881852 | gusenberg@gmail.com

EDUCATION

B.Sc, Medical Engineering, Afeka College of Engineering (2019 - 2023)
Average 86.6, Specialization: Medical Information Systems

PROFESSIONAL EXPERIENCE

Software & 3D Modeling Engineer, Geemaps (2024 - 2025)

- Developed AR infrastructure application using Unity for interactive building visualization.
- Created IFC viewer with JavaScript, HTML, and Three.js for comprehensive building models.
- Implemented and optimized Gaussian splat rendering technology, improving efficiency and reducing file sizes.
- Built automation workflows in Microsoft Power Automate and bash.
- Processed and classified point cloud data using Spatial LM using Python and Linux.
- Developed Python scripts to automate Blender builds based on text output.
- Contributed to R&D for incorporating omni-wheel robots for remote-controlled scanning operations.
- Conducted field laser scanning operations, created photorealistic 3D models and virtual tours via Reality Capture, and refined point cloud data using Leica Register, Metaport, Cloud Compare and Revit.

Chess Teacher (2022 - 2024)

- Designed and implemented structured learning programs for students of various skill levels

Math Tutor,Private, Zeitlin High-School (2021 - 2024)

- Provided specialized mathematics instruction for high school students

PROJECTS

Smart Medical Bracelet (Final Project)

- Designed wearable device using Arduino to measure vital signs including heart rate, oxygen saturation, and GPS location
- Developed information system and user interface using Python and MySQL

Medical Data & Signal Processing Projects (Afeka & Ben Gurion University)

- Developed algorithms involving classic and AI approaches for skin cancer classification and tumor detection in medical imaging using Python and MATLAB
- Created computer vision system to track soccer bouncing count and detect violations like hand touching and ball falling to the floor.
- Performed advanced analyses on biological signals (EKG, EMG, EEG) using Python signal processing techniques
- Built decision support and business intelligence systems for medical diagnostics using MySQL and Python
- Modeled artery bypass under various blood flow conditions using Fluent and SolidWorks

TECHNICAL SKILLS

- **Programming**:Python (signal processing, image processing, automation), JavaScript (Three.js),Unity
- **Data Management**: MySQL, data analysis, business intelligence
- **Engineering Tools**: Arduino, MATLAB, Ansys Fluent, SolidWorks
- **3D Technologies**: Point cloud processing, Gaussian splat optimization, VR/AR applications , Virtual tours.
- **Other**: Microsoft 365 (including Power Automate), Git, technical documentation
- **Languages**: English (perfect score on Amir test), Hebrew (native)