Varvara Sotiropoulou, MSc candidate

Varvara Sotiropoulou was born in Athens, Geece, in 1993. She studied physics at the University of Crete and graduated in 2019. In addition, she completed her internship at the facilities of Biomedical Imaging at the Foundation for Research and Technology - Hellas (FORTH), (2018-2019). In 2019-2020 she joined the postgraduate program 'Medical physics- Radiophysics' of the National and Kapodistrian University of Athens and she is undertaking her master thesis at the Medical School of University of Crete.

Research Interests:

1. Monte Carlo-based personalized dosimetry in clinical CT examinations and interventional procedures involving ionizing radiation, in order to quantify the absorbed patient doses, associating them with radiogenic risks and optimize patient radiation protection.
2. Biomedical image processing. Radiological study of human diseases through Computed Tomography.

Scientific Research:

- BSc Thesis
  Title: 'Radiation doses absorbed by patients during Image Guided Interventional Procedures'. Supervisor: Prof. John Damilakis.
- Internship
  Supervisor: Dr. Ioannis Zaharakis.
  Use of the eXplore Locus Micro CT Scanner.
  Cooperation with departments of Biology and Medical school of UOC. Study and image processing through MATLAB of mice's skulls, after administrating experimental medicine for curing craniosynostosis.
  Collaboration with department of nuclear medicine of PaGni and Medical school of UOC, for study and imaging by Computed Tomography of upper part of femur bone and correlation of results with osteoporosis condition.
- MSc thesis
  Title: 'Personalized, organ-specific dosimetric comparison in patients undergoing diagnostic and treatment planning CT using Monte Carlo simulations'.
  Supervisor: Prof. John Damilakis.