Antreas Anastasiou

10B, Epikourou Street, Larnaca, 6055, Cyprus
anastasiouandreas.com, aanast01[at]ucy.ac.cy

EDUCATION

University of Cyprus, Nicosia, Cyprus
- Ph.D. in Computer Engineering — Sep 2020 – *Present*
  - Thesis: Autonomous Systems for Multiple Castaway Track and Follow Operations Utilizing Unmanned Vehicles
  - Advisors: Prof. Christos Panayiotou, Dr. Panayiotis Kolios
  - Focus: UAV Path Planning Optimization, Embedded Systems, Algorithm Development.
  - GPA: 6,43 / 10.0 (Currently)

University of Cyprus, Nicosia, Cyprus
- M.Sc. in Computer Engineering — Sep 2018 – May 2020
  - Thesis: Autonomous Distributed UAV Swarm for Search and Track Operations Utilizing Edge Computing
  - Advisors: Prof. Christos Panayiotou, Dr. Panayiotis Kolios
  - Focus: Multi-UAV Platform Development, Distributed UAV Swarms Utilizing Edge Computing.
  - GPA: 7.93 / 10.0

University of Cyprus, Nicosia, Cyprus
- B.Sc. in Computer Engineering — Sep 2014 – May 2018
  - Thesis: Path Planning for UAV Swarms
  - Advisors: Prof. Christos Panayiotou, Dr. Panayiotis Kolios
  - Focus: Algorithm development, Path Planning for multi-UAV, Networking.
  - GPA: 7.25 / 10.0

Technical School of Larnaca, Larnaca, Cyprus
- High School Diploma in Computer Engineering — Sep 2010 – Jun 2013
  - GPA: 18.73 / 20.0

WORK EXPERIENCE

KIOS Research and Innovation Center of Excellence, Nicosia, Cyprus
- Ph.D. Candidate, Emergency Response Technologies Team, — Sep 2023 – *Present*
  - Developing Model Predictive Control strategies for multiple castaway Search and Detect.
  - Developing Model Predictive Control systems for multi-agent Search, Detect and Track missions.
- Ph.D. Student, Emergency Response Technologies Team, — Sep 2020 – Sep 2023
  - Developed a novel Model Predictive Control algorithm for Search and Rescue operations in maritime environments.
  - Developed Model Predictive Control system for multiple castaway detection and tracking.
- Research Engineer, Emergency Response Technologies Team, — Jul 2018 – Sep 2020
  - Developed a Path Planning algorithm for Search and Rescue operations.
  - Developed a custom android application for automating the use of Unmanned Aerial Vehicles.
  - Developed a UAV swarm by utilizing On-board Computing Systems.

University of Cyprus, Nicosia, Cyprus
- Computer Lab Assistant, Information Systems Service, — Sep 2015 – May 2018
  - Responsible for monitoring the computer labs.
  - Provided technical support for printers and computers at the labs.
  - Provided support over the phone.

N.E. Audiovisual Solutions (Cyprus) Limited, Limassol, Cyprus
- Technician – Intern, Department of Technical Support, — Jun 2016 – Aug 2016
  - Installation of home and business automation (KNX)
  - Installation of video walls, DLPs and smart Tvs
  - Installation of professional audio systems

Military Service, Republic of Cyprus, Cyprus
- National Guard, Department of Motorized Infantry, — Jul 2013 – Sep 2014
  - Served as clerk at Dept. of Vehicle Support.

LANGUAGES
- Greek: Native language.
- English: Fluent (speaking, reading, writing)

VOLUNTEERING
- IEEE University Of Cyprus Student Branch, Member
- Cyprus Civil Defense, Aerial Observation Unit, Volunteer

AWARDS & HONORS
- CDC 23 Cooperative Areal Robotics Inspection Challenge, 1st Place
- ICUAS 22 Student Competition, 6th Place

- HackCyprus 2019 Hackathon, 2nd Place

SKILLS STS Remote Pilot License (EASA), C/C++, Python, Bash, Robot Operating System(ROS), Gazebo, MATLAB, Gurobi, LaTeX, MS Office.

INTERESTS Travelling, 3D Design, 3D Printing, Electronics.

PUBLICATIONS

- **Anastasiou, A.**, Papaioannou, S., Kolios, P. and Panayiotou, C.G., 2023, June. Model Predictive Control For Multiple Castaway Tracking with an Autonomous Aerial Agent. In 2023 European Control Conference (ECC) (pp. 1-8). IEEE.
- Farooq, A., **Anastasiou, A.**, Souli, N., Laoudias, C., Kolios, P.S. and Theocharides, T., 2022, July. Uav autonomous indoor exploration and mapping for sar missions: Reflections from the icuas 2022 competition. In 2022 19th International Conference on Ubiquitous Robots (UR) (pp. 621-626). IEEE.
- Savva, A., Zacharia, A., Makrigiorgis, R., **Anastasiou, A.**, Kyrkou, C., Kolios, P., Panayiotou, C. and Theocharides, T., 2021, June. ICARUS: automatic autonomous power infrastructure inspection with UAVs. In 2021 International Conference on Unmanned Aircraft Systems (ICUAS) (pp. 918-926). IEEE.
- **Anastasiou, A.**, Makrigiorgis, R., Kolios, P. and Panayiotou, C., 2021, June. Hyperion: A Robust Drone-based Target Tracking System. In 2021 International Conference on Unmanned Aircraft Systems (ICUAS) (pp. 927-933). IEEE.
- **Anastasiou, A.**, Kolios, P., Panayiotou, C. and Papadaki, K., 2020, September. Swarm path planning for the deployment of drones in emergency response missions. In 2020 International Conference on Unmanned Aircraft Systems (ICUAS) (pp. 456-465). IEEE.
- Souli, N., Makrigiorgis, R., **Anastasiou, A.**, Zacharia, A., Petrides, P., Lazanas, A., Valianti, P., Kolios, P. and Ellinas, G., 2020, September. HorizonBlock: Implementation of an autonomous counter-drone system. In 2020 International Conference on Unmanned Aircraft Systems (ICUAS) (pp. 398-404). IEEE.
- Terzi, M., **Anastasiou, A.**, Kolios, P., Panayiotou, C. and Theocharides, T., 2019, December. SWIFTERS: A multi-UAV platform for disaster management. In 2019 International conference on information and communication technologies for disaster management (ICT-DM) (pp. 1-7). IEEE.