europass

Mihai-Alin Stamate

ABOUT ME

- energetic, professional, very good communication skills - attentive to details, persistent, competent, team player - always goal-oriented

WORK EXPERIENCE

[30/09/2017 – Current]

Active Military

UM 0472 Bucharest

City: Bucharest
Country: Romania

[01/11/2008 – 30/09/2017]

Military intelligence specialist

Military Intelligence Directorate/Ministry of National Defence

City: Bucharest
Country: Romania
Military intelligence

[01/04/2005 – 31/10/2008]

SHADOW 600 unmanned aircraft system internal pilot

Military Intelligence Battalion/Ministry of National Defence

City: Buzău
Country: Romania

- piloting/operating unmanned aerial vehicles (UAVs) during reconnaissance/ surveillance missions in the country and in the military theatres of operations in Iraq and Afghanistan;
- operation of the payload mounted on board the SHADOW 600 TV-FLIR (Forward-Looking Infrared) aircraft
- performing maintenance and servicing work on the SHADOW 600 UAV system

[01/10/2004 – 31/03/2005]

PUMA SOCAT helicopter maintenance specialist

90th Aerial Transport Base / Ministry of National Defense

City: Otopeni
Country: Romania

- execution of the regulatory maintenance and servicing work on PUMA SOCAT helicopters
- carrying out repair work on the various airframe-engine assemblies/sub-assemblies of PUMA SOCAT helicopters

[01/09/2003 – 30/09/2004]

PUMA SOCAT helicopter maintenance specialist

BOTENI Air Helicopter Base / Ministry of National Defence

City: Boteni/TITU

Country: Romania

- execution of the regulatory maintenance and servicing work on PUMA SOCAT helicopters
- carrying out repair work on the various airframe-engine assemblies/sub-assemblies of PUMA SOCAT helicopters

EDUCATION AND TRAINING

[01/10/2017 – Current]

PhD student in Industrial Engineering

Doctoral School of Industrial Engineering and Robotics / Polytechnic University of Bucharest https://upb.ro/

Address: Splaiul Independenței, nr. 313 , 060042, Bucharest, Romania

[01/10/2015 – 30/06/2017]

Master's degree

Faculty of Engineering and Management of Technological Systems / Universitatea Politehnica Buc.

Address: Splaiul Independenței, nr. 313, 060042, BUCURESTI, Romania

Field(s) of study: ROBOTICS

Final grade: 9,67

Thesis: Conceptual and functional study, with practical realization, of a multirotor drone

- artificial vision systems for industrial robots
- industrial robot drive systems
- numerically controlled machining centers (CNC)
- advanced robotics-assisted engineering
- robots for personal and social services
- 3D Printing
- industrial robot automation
- off-line simulation of robot cells

[01/10/2010 – 22/07/2015]

Bachelor's degree

Faculty of Machine Technology / Technical University of Construction, Bucharest, Romania https://www.utilajutcb.ro/

Address: Calea Plevnei, nr. 59, sector 1, 010223, BUCURESTI, Romania

Field(s) of study: Mechanical Engineering

Final grade: 10

Thesis: Monitoring system for routine building tracking activity

- Thermomechanics
- Machinery parts
- Mechanics
- Special mathematics
- Mathematical analysis
- Resource allocation management in construction
- Machinery in the building materials industry
- Mechanisms
- Design of various sub-assemblies and assemblies using CAD program SolidWorks

[01/09/2001 – 31/07/2003]

Airforce Warrant Officer

Traian Vuia" Air Force Military School for Warrant Officers and NCOs, Mediaș http://www.smmmsfa.ro/

Address: New location: Boboc, Cochirleanca, 127192, Boboc, Romania

Field(s) of study: Aircrafts and aviation engines

Final grade: 9,83

- Aerodynamics
- Thermodynamics of gas turbine engines

- Construction and operation of turbojet engines
- Construction of the fuselage of the MIG-21 LANCER aircraft
- Airframe construction of the IAR 330 PUMA SOCAT aircraft
- Hydraulic/fuel installations on turbojet engines

[01/09/1997 – 01/07/2001]

High school diploma

Military High School "Mihai Viteazul", Alba-Iulia

Address: Revoluției Blvd. 1989, nr. 25, 510077, Alba-Iulia, Romania
Field(s) of study: Vocational field - military
Final grade: 9,40

- mathematics - computer science
- general military training

[23/05/2017 – 25/05/2017]

Building Geodatabases in ArcGIS

ESRI Romania, Bucharest

Address: Strada Washington, nr. 25, BUCURESTI, Romania
- creation of databases in ArcGIS
- database sharing

[15/05/2017 – 19/05/2017]

Geolocation science and introduction to SAR

USAFE (United States AirForce in Europe), Ramstein (Germania)

Address: Ramstein, Germany
Field(s) of study: Synthetic Aperture Radar
- geolocation concepts: geometric models of the earth, coordinate systems, global positioning system
- satellites
- introduction to SAR (Synthetic Aperture Radar) terminology

[15/05/2016 – 28/05/2016]

ArcGIS Specialist

ESRI Romania, Bucharest

Address: Washington street, nr. 25, Bucharest, Romania
Field(s) of study: ArcGIS
- ArcGIS for Desktop
- ArcGIS for Server
- ArcGIS Online
- Arc Pro

[05/11/2012 – 18/01/2013]

UAV ScanEagle Pilot/operator

INSITU, Bingen / Washington (USA) https://www.insitu.com/

Address: 118 E Columbia River Way, Cook, WA 98605, USA, 98605, BINGEN, United States
Field(s) of study: Flying the ScanEagle UAS
- Aeronautics, flight safety, air traffic coordination
- Construction and operation of the ScanEagle system and the MWIR 2.0 (Medium Wavelength Infrared) payload
- Piloting the ScanEagle aircraft

[31/01/2011 – 25/02/2011]

Military analyst in aerial and satellite imagery interpretation

"Ferdinand I" Military Technical Academy

Address: George Coșbuc Blvd. 39-49, 050141, București, Romania
Field(s) of study: Geospatial Intelligence

Final grade: 10

- Techniques for photointerpretation and analysis of images obtained with various types of sensors on board aircraft or civilian and military satellites
- SAR (Synthetic Aperture Radar), IR (Infrared), optical sensors

[13/05/2009 – 22/05/2009]

Specialist in the field of SAR (Synthetic Aperture Radar) image interpretation

'Ferdinand I' Military Technical Academy and DELFT Technical University of Netherlands

Address: George Coșbuc Blvd. 39-49, 050141, București, Romania

Field(s) of study: Intelligence from Imagery Analysis

Final grade: 9,20

- Techniques for photointerpretation and analysis of sensor images Synthetic Aperture Radar (SAR) sensors on board aircraft or civilian and military satellites

[10/09/2007 – 21/09/2007]

Military analyst in aerial and satellite imagery interpretation

European Union Satellite Centre, Torejon de Ardoz (Spania) and National Defence University

Address: Panduri street 68-72, 050662, Bucharest, Romania

Field(s) of study: Geospatial Intelligence

- Photointerpretation techniques and analysis of images obtained with different types of on-board sensors aircraft or civilian and military satellites
- SAR (Synthetic Aperture Radar), IR (Infrared), optical sensors

[05/09/2005 – 30/09/2005]

Military analyst in aerial and satellite imagery interpretation

"Ferdinand I" Military Technical Academy

Address: George Coșbuc Blvd. 39-49, 050141, București, Romania

Field(s) of study: Geospatial Intelligence

Final grade: 10

- Techniques for photointerpretation and analysis of images obtained with various types of sensors on board aircraft or civilian and military satellites
- SAR (Synthetic Aperture Radar), IR (Infrared), optical sensors

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING C1 **READING** C1 **WRITING** C1

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

DIGITAL SKILLS

Social Media / Social Network | Very good use of Microsoft Office tools (Word Excel PowerPoint) | MATLAB (very good) | Social media/social Networks | Very good computer skills. | Intermediate programming | ANSYS CFD (good knowledge) | Good knowledge of ANSA | Ansys Fluent (Good Knowledge) | Meta CAE post-processor

PROJECTS

[10/09/2019 – 09/01/2021] **POCU 380/6/13 - Cod SMIS: 124539, Contract no. 51680/09.07.2019**

"Fellowships for entrepreneurship education among PhD students and postdoctoral researchers (Be Antreprenor!)"

Period of participation: 10.09.2019 ÷ 09.01.2021, as a PhD student entrepreneur, within the project "Scholarships for entrepreneurship education among PhD students and

postdoctoral researchers (Be Antreprenor!)" (Contract no. 51680/09.07.2019 POCU/380/6/13 - SMIS Code: 124539).

- **Stamate M.A.**, Business plan on the establishment of a company for the manufacture of multirotor drone systems, supported as a result of participation, as a PhD student entrepreneur, in the project "Fellowships for entrepreneurial education among PhD students and postdoctoral researchers (Be Antreprenor)" (Contract no. 51680/09.07.2019 POCU/380/6/13 - SMIS Code: 124539).

JOURNALS - Q2

Improvement of Hexacopter UAVs Attitude Parameters Employing Control and Decision Support Systems

Stamate, M. A.; Pupăză, C.; Nicolescu, F. A.; Moldoveanu, C. E. (2023) *Improvement of Hexacopter UAVs Attitude Parameters Employing Control and Decision Support Systems*. *Sensors*, Special Issue "Advanced Intelligent Control in Robots", *23*(3), IF 3.847, Q2, pp. 1446, https://doi.org/10.3390/s23031446.

ISI PROCEEDINGS

Hexacopter Model Development Using Advanced Simulation Procedures

Stamate, M.A., Nicolescu, A.F., Pupăză, C. (2020) *Hexacopter model development using advanced simulation procedures,* Proceedings of the 34th International Business Information Management Association Conference (IBIMA) 4-5 November 2020, Granada, Spain, **ISBN: 978-0-9998551-5-7**, Innovation Management and Education Excellence through Vision 2020, Editor Khalid S. Soliman International Business Information Management Association (IBIMA), Conference Paper.

INTERNATIONAL DATA-BASES

Mathematical model of a multi-rotor drone prototype and calculation algorithm for motor selection

Stamate, M. A., Nicolescu, A. F., Pupăză, C. (2017) *Mathematical model of a multi-rotor drone prototype and calculation algorithm for motor selection*, Proceedings in Manufacturing Systems (icmas.eu), Volume 12, Issue 3, 119-128, ISSN 2067-9238, Copernicus

Study regarding flight autonomy estimation for hexacopter drones in various equipment configurations

Stamate, M. A., Nicolescu, A. F., Pupăză, C. (2020) *Study regarding flight autonomy estimation for hexacopter drones in various equipment configurations*, Proceedings in Manufacturing Systems (icmas.eu), Volume 15, Issue 2, 81-90, ISSN 2067-9238, Copernicusption...

Conceptual and functional study of a multirotor drone prototype used for security applications

Stamate, M. A., Nicolescu, A. F. (2017) *Conceptual and functional study of a multirotor drone prototype used for security applications,* Research and Science Today (rstjournal.com), Supplement No. 2/2017, p. 155-164, ISSN-p: 2247-4455 / ISSN-e: 2285-9632 / ISSN-e supplement: 2344-0007, Google Scholar, 1225 downloads

PRESENTATIONS

Studiu de fundamentare conceptuală și funcțională a unei drone multirotor pentru aplicații de securizare perimetrală

Stamate, M. A., Nicolescu, A.F. (2017). *Studiu de fundamentare conceptuală și funcțională a unei drone multirotor pentru aplicații de securizare perimetrală*. Student Scientific Session – 1st place.