

## PERSONAL INFORMATION

# Dionysios Emmanouil Pettas

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Sex Male | Date of birth 20/07/1981 | Nationality Greek

### **WORK EXPERIENCE**

#### 01/01/2007 - present

## Research, Design & Development Robotics Engineer

Hellenic Centre for Marine Research, PO Box 2214, 71003, Heraklion-Crete, Greece

- Design, development and construction of custom autonomous robotic vehicles and systems.
- Design, evaluation and construction of prototype scientific equipment and experimental devices
- Maintenance of components, spare parts and standards research equipment devices
- Installation of environmental measurement sensor
- Design and manufacture of mechanical parts for use in high pressure environment (deep sea housings, sediment traps etc.)
- Designing parts and large assemblies in solid 3d software

Sector Research Centre

## 08/2008 - 07/2012

## Part time Programmer in CNC Lathe Machine

Candia Capa SA, Heraklion Crete, Greece

- Programming 2-axis lathe CNC machine (DMG model NEF-400 with Fanuc 210i-T Controller)
- Design mechanical components for agricultural machines

Sector Industrial

## 10/2008 - 06/2009

# Hourly paid teacher

Public secondary education, Heraklion, Crete, Greece

 Lessons: Mechanical elements, Internal Combustion Engines 1, Internal Combustion Engines 2, Control technology and diagnostics (269 hours)

Sector Educational

#### 10/2006 - 02/2009

## Hourly paid teacher

Public Institute of Vocational Training, Heraklion, Grete, Greece

- Technical of motor vehicles. Lesson: Mechanical design (28 hours)
- Technical of motor vehicles. Lesson: Elements Electro-techniques and sensors (42 hours)
- Instructor candidate drivers. Lesson: Mechanics and technical vehicles (98 hours)
- Instructor candidate drivers. Lesson: Driving technique (42 hours)

Sector Educational

#### 07/1994 - 08/2005

## Motorcycle engineer assistant (2 months/year)

Spiridakis Kostas, Workshop Motorcycles, Heraklion Crete, Greece

- Motorcycles service and trouble shootings
- Rebuilding classic motorbikes
- Conversions especially of chopper motorbikes

Sector Repair



#### **EDUCATION AND TRAINING**

## 2013 - 2017 MSc in Advanced Production Systems, Automation and Robotics

Technological Educational Institute of Crete (Greece)

 Master Thesis: Development and control of a directional antenna system for use in oceanographic buoys. Available at <a href="https://apothesis.lib.teicrete.gr/handle/11713/8651">https://apothesis.lib.teicrete.gr/handle/11713/8651</a>

## 2007 - 2008 Annual Training Program for Teachers

School of Pedagogical and Technological Education (Heraclion, Greece)

## 1999 - 2005 BSc in Automotive Engineering

Alexander Technological Institute of Thessaloniki (Greece)

#### PERSONAL SKILLS

## Mother tongue(s)

## Greek

## Other language(s)

UNDERSTANDING		SPEAKING		WRITING	
Listening	Reading	Spoken interaction	Spoken production		
B2	B2	B1	B1	B2	
Test of English for International Communication (TOIEC) - score 670					

English

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages

### Communication skills

Good communication skills gained through the involvement in research teams and international meetings.

## Organisational / managerial skills

Head of HCMR (Crete) machining center.

#### Job-related skills

- Ability to work in the field under pressure ( Speedboat Operator on scientific missions)

## Digital skills

SELF-ASSESSMENT						
Information processing	Communication	Content creation	Safety	Problem solving		
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user		

Levels: Basic user - Independent user - Proficient user Digital competences - Self-assessment grid

- Good command of office suite (word processor, spread sheet, presentation software)
- Experience in computer programming in Matlab, Simulink, Python, C and C++.
- Experience in design, FEA and dynamic simulation with 3d software Autodesk Inventor.

## Other skills

- Scuba diver: certified from PADI on Advanced open water.
- Speedboat operator license from the Hellenic Port authority.

## Driving licence

A, B



#### ADDITIONAL INFORMATION

#### **Publications**

Petihakis, G., Perivoliotis, L., Korres, G., Ballas, D., Frangoulis, C., Pagonis, P., Ntoumas, M., **Pettas, M.**, Chalkiopoulos, A., Sotiropoulou, M., Bekiari, M., Kalampokis, A., Ravdas, M., Bourma, E., Christodoulaki, S., Zacharioudaki, A., Kassis, D., Potiris, E., Triantafyllou, G., Tsiaras, K., Krasakopoulou, E., Velanas, S. and Zisis, N. (2018). An integrated open-coastal biogeochemistry, ecosystem and biodiversity observatory of the eastern Mediterranean – the Cretan Sea component of the POSEIDON system. *Ocean Sci.*, 14(5), 1223–1245. http://dx.doi.org/10.5194/os-14-1223-2018

Potiris, E., Frangoulis, C., Kalampokis, A., Ntoumas, M., **Pettas, M.**, Petihakis, G. and Zervakis, V. (2018). Acoustic Doppler current profiler observations of migration patterns of zooplankton in the Cretan Sea. *Ocean Sci.*, 14(4), 783–800. <a href="http://dx.doi.org/10.5194/os-14-783-2018">http://dx.doi.org/10.5194/os-14-783-2018</a>

Chatzigeorgiou G., Dailianis T., Faulwetter S., **Pettas M**., Arvanitidis C. (2012). MANOSS – a manually operated suction sampler for hard bottom benthos., Transit. Waters Bull. 6, 42-49. ISSN 1825-229X, DOI 10.1285/i1825229Xv6n2p42. http://siba-ese.unisalento.it/index.php/twb/article/view/12799/11398,

#### Conferences

M. Pettas, I.G. Priede, A. Kalampokis, C. Frangoulis, M. Ntoumas, G. Petihakis. (2019). Compact Light-weight camera system for ARGO extension applications. Proceedings of the 7th Euro-Argo Science Meeting, 22-23 October 2019, Athens. In session 5 21\_Pettas.pdf <a href="https://www.euro-argo.eu/News-Meetings/Meetings/Euro-Argo-Users-Meetings/7th-Euro-Argo-Science-Meeting/POSTERS">https://www.euro-argo.eu/News-Meetings/Meetings/Euro-Argo-Users-Meetings/7th-Euro-Argo-Science-Meeting/POSTERS</a>

Perivoliotis, L., Petihakis, G., Korres, G., Ballas, D., Frangoulis, C., Pagonis, P., Ntoumas, M., **Pettas, M.**, Chalkiopoulos, A., Sotiropoulou, M., Bekiari, M., Kalampokis, A., Ravdas, M., Bourma, E., Christodoulaki, S., Zacharioudaki, A., Kassis, D., Potiris, M., Triantafyllou, G., Papadopoulos, A., Tsiaras, K. and Velanas, S. (2017). The POSEIDON system, an integrated observing infrastructure at the Eastern Mediterranean as a contribution to the European Ocean Observing System. Proceedings of the 8<sup>th</sup> EuroGOOS Conference, Bergen, Norway, 3-5 October 2017. p.53-61. http://eurogoos.eu/download/publications/EuroGOOS-2017-Conference-Proceedings.pdf

**Pettas, M.**, Frangoulis, C. and Petihakis, G. (2015). A hydraulic winch to support deep CTD casts using small boats. Proceedings of PERSEUS Scientific Conference on "Integrated Marine Research in the Mediterranean and the Black Sea", Brussels, Belgium, 7-9 December 2015. p. 323-324. <a href="http://www.perseus-net.eu/assets/media/PDF/SC%20Brussels%207-9%20Dec%202015/6875.pdf">http://www.perseus-net.eu/assets/media/PDF/SC%20Brussels%207-9%20Dec%202015/6875.pdf</a>

Frangoulis, C., Ntoumas, E., Zervakis, V., **Pettas, E.**, Potiris, E., and Psarra, S. 2015. Testing a towed undulating vehicle in the Aegean Sea. Proceedings of the 11th Panhellenic Symposium of Oceanogaphy & Fisheries, Mytilene, Lesvos Island, Greece, 13-17 May 2015 p. 769-772. <a href="https://cloudfs.hcmr.gr/index.php/s/ld8RsUEpBatAQan">https://cloudfs.hcmr.gr/index.php/s/ld8RsUEpBatAQan</a>

#### **Projects**

2018-2020: HIMIOFOTS (Hellenic Integrated Marine Inland water Observing, Forecasting and Offshore Technology System), Hellenic Centre for Marine Research

2017-2020: CLAIM (Cleaning Litter by developing and Applying Innovative Methods in european seas), Hellenic Centre for Marine Research

2016-2020: TAPAS (Tools for Assessment and Planning of Aquaculture Sustainability) H2020, Hellenic Centre for Marine Research

2015-2019: JERICO-NEXT (Joint European Research Infrastructure network for Coastal Observatory-Novel European eXpertise for coastal observaTories), Hellenic Centre for Marine Research

2015-2017: AGEING OF COMPOSITES IN DEEP-WATER ENVIRONMENT (FixO3), Hellenic Centre for Marine Research

2013-2017: FixO3 (FIXed-point Open Ocean Observatories), Hellenic Centre for Marine Research





### Curriculum Vitae

2013-2015: DEEP CO HOUS (DEEP sea pressure HOUSings made of COmposite materials), Hellenic Centre for Marine Research

2011-2015: JERICO (Joint European Research Infrastructure Network for Coastal Observatories), Hellenic Centre for Marine Research

2007-2008: POSEIDON II, Hellenic Centre for Marine Research

### Seminars

Autodesk Inventor Professional 2015 (Advanced 24 hours). April 2019. Alphanetrix (Autodesk silver Partner), Athens, Creece

MTU engine (40 hours) course name : 2000-03 M1/M. April 2013. Al Masaood MTU Division, Training Center, Abu Dhabi, UAE

MTU engine (40 hours) course name : 4000 M1/M. April 2013. Al Masaood MTU Division, Training Center, Abu Dhabi, UAE

MTU engine management system (32 hours) course name: ECU-4/E2/M. April 2013. Al Masaood MTU Division, Training Center, Abu Dhabi, UAE

MTU engine management system (32 hours) course name: ECU-7/E2/M. April 2013. Al Masaood MTU Division, Training Center, Abu Dhabi, UAE

MTU engine (40 hours) course name: 4000G / M1. November 2012 Al Masaood MTU Division, Training Center, Abu Dhabi, UAE

Autodesk Inventor 2013 (Fundamentals 36 hours). May 2012. Alphanetrix (Autodesk silver Partner), Athens, Creece

Modern techniques welds (4 hours). September 2008. Bohler welding group austria & REHM welding technology & DMK, Heraclion, Creece

Handling and programming 2-axis lathe C.N.C (40 hours) DMG model NEF-400 with Fanuc 210i-T controller.

Paretzoglou (Industrial equipment), Athens, Greece

## Certifications

Introduction to Python. Mathesis@Crete Univercity Press. <a href="https://mathesis.cup.gr/certificates/ee2afa399e37425c9bbd861b585f644e">https://mathesis.cup.gr/certificates/ee2afa399e37425c9bbd861b585f644e</a>

Motor engineer work license. Ministry of Transportation, Greece.

2nd Specialty Installation Engineer License. Ministry of Industry, Greece

Welder Craft License. Ministry of Industry, Greece

#### Memberships

2005 – present: Member of the professional and scientific association of engineers of technological education of Greece

## Honours and awards

6<sup>th</sup> position at the World Soccer School Games of the Secondary School of Lyceum in Lima, Peru. 02/07/1997.