

Personal information:

First name: Eduard
Surnames: VIDAL GARCIA
Nationality: Spanish
Personal id. (NIF): 77921715S
Gender: Male
Date of birth: May 25, 1991
Place of birth: Arbúcies
Country: Spain
State: Girona

**Bachelor's degree:**

Name: Industrial Engineer
University: University of Girona
Year: 2014
Awards: Scored 8.79/10 and 3.03/4. Best final project award by "Demarcación de Girona, Colegio de Ingenieros Industriales de Cataluña"

Master's degree:

Name: ViBOT Erasmus Mundus Master Course in Robotics and Computer Vision
University: University of Burgundy (France), University of Girona (Spain) and Heriot-Watt University (UK)
Year: 2016
Awards: Scored 9.6/10. Best student award

Languages:

Certificates: English: Cambridge First Certificate in English. 2010
English: ETS TOEFL iBT. Scored 102/120. 2014

Publications:

Authors and title: M. Carreras, C. Candela, D. Ribas, A. Mallios, L. Magí, E. Vidal, N. Palomeras and P. Ridao, "SPARUS II, design of a lightweight hovering AUV"
Journal, book or conference: 5th International Workshop On MARine TECHnology, MARTECH 2013 Girona
Year: 2013

Authors and title: M. Carreras, E. Vidal, C. Candela, D. Ribas, A. Mallios, L. Magí, N. Palomeras and P. Ridao, "SPARUS II AUV, an open platform for the euRathlon underwater robotics challenge"
Journal, book or conference: EuRathlon Workshop on Field Robotics, Germany
Year: 2013

- Authors and title: J. D. Hernandez, E. Vidal, G. Vallicrosa, E. Galceran and M. Carreras, "Online Path Planning for Autonomous Underwater Vehicles in Unknown Environments"
- Journal, book or conference: IEEE International Conference on Robotics and Automation (ICRA)
- Year: 2015
- Authors and title: J. D. Hernandez, E. Vidal, G. Vallicrosa, E. Pairet and M. Carreras, "Simultaneous Mapping and Planning for Autonomous Underwater Vehicles in Unknown Environments"
- Journal, book or conference: OCEANS15 MTS/IEEE Genova
- Year: 2015
- Authors and title: J. D. Hernandez, G. Vallicrosa, E. Vidal, E. Pairet, M. Carreras and P. Ridao, "On-line 3D Path Planning for Close-proximity Surveying with AUVs"
- Journal, book or conference: IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV 2015)
- Year: 2015
- Authors and title: M. Carreras, C. Candela, D. Ribas, N. Palomeras, L. Magí, A. Mallios, E. Vidal, E. Pairet and P. Ridao, "Testing SPARUS II AUV, an open platform for industrial, scientific and academic applications"
- Journal, book or conference: 6th International Workshop On MARine TECHnology, MARTECH 2015 Cartagena
- Year: 2015
- Authors and title: J. D. Hernandez, M. Moll, E. Vidal, M. Carreras and Lydia E. Kavraki, "Planning Feasible and Safe Paths Online for Autonomous Underwater Vehicles in Unknown Environments"
- Journal, book or conference: IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)
- Year: 2016
- Authors and title: J. D. Hernandez, K. Istenic, N. Gracias, N. Palomeras, R. Campos, E. Vidal, R. García and M. Carreras, "Autonomous Underwater Navigation and Optical Mapping in Unknown Natural Environments"
- Journal, book or conference: Sensors. Vol. 16, no.8, p. 1174
- Year: 2016

- Authors and title: M. Carreras, J. D. Hernández, E. Vidal, N. Palomeras and P. Ridao, "Online Motion Planning for Underwater Inspection"
- Journal, book or conference: AUV2016 Japan
- Year: 2016
- Authors and title: E. Vidal, J. D. Hernandez, K. Istenic and M. Carreras, "Online View Planning for Inspecting Unexplored Underwater Structures"
- Journal, book or conference: IEEE Robotics and Automation Letters (RA-L). Vol. 2, no. 3, pp. 1436-1443
- Year: 2017
- Authors and title: J. D. Hernandez, E. Vidal, J. Greer, R. Piasco, P. Jaussaud, M. Carreras and R. Garcia, "AUV online mission replanning for gap filling and target inspection"
- Journal, book or conference: IEEE OCEANS 2017-Aberdeen
- Year: 2017
- Authors and title: N. Hurtos, A. Mallios, N. Palomeras, J. Bosch, G. Vallicrosa, E. Vidal, D. Ribas, N. Gracias, M. Carreras and P. Ridao, "LOON-DOCK: AUV homing and docking for high-bandwidth data transmission"
- Journal, book or conference: IEEE OCEANS 2017-Aberdeen
- Year: 2017
- Authors and title: A. Mallios, E. Vidal, R. Campos and M. Carreras, "Underwater caves sonar data set"
- Journal, book or conference: International Journal of Robotics Research (IJRR). Vol. 36, no. 12, pp. 1247-1251
- Year: 2017
- Authors and title: M. Carreras, J. D. Hernandez, E. Vidal, N. Palomeras, D. Ribas and P. Ridao, "Sparus II AUV-A Hovering Vehicle for Seabed Inspection"
- Journal, book or conference: IEEE Journal of Oceanic Engineering (JOE). Vol. 43, no. 2, pp. 344-355
- Year: 2018
- Authors and title: E. Vidal, J. D. Hernandez, K. Istenic and M. Carreras, "Optimized Environment Exploration for Autonomous Underwater Vehicles"
- Journal, book or conference: IEEE International Conference on Robotics and Automation (ICRA)
- Year: 2018

- Authors and title: N. Palomeras, G. Vallicrosa, A. Mallios, J. Bosch, E. Vidal, N. Hurtos, M. Carreras and P. Ridao, “AUV homing and docking for remote operations”
- Journal, book or conference: Ocean Engineering Journal. Vol. 154, pp. 846-894
- Year: 2018
- Authors and title: E. Vidal, J. D. Hernandez, N. Palomeras and M. Carreras, “Online Robotic Exploration for Autonomous Underwater Vehicles in Unstructured Environments”
- Journal, book or conference: IEEE Oceans 2018-Kobe (2nd prize at the Student Poster Competition)
- Year: 2018
- Authors and title: E. Vidal, N. Palomeras and M. Carreras, “Online 3D Underwater Exploration and Coverage”
- Journal, book or conference: AUV2018 Portugal
- Year: 2018
- Authors and title: N. Palomeras, N. Hurtos, E. Vidal and M. Carreras, “Autonomous Exploration of Complex Underwater Environments Using a Probabilistic Next-Best-View planner”
- Journal, book or conference: IEEE Robotics and Automation Letters (RA-L). Vol. 4, no. 2, pp. 1619-1625
- Year: 2019
- Authors and title: E. Vidal, M. Moll, N. Palomeras, J. D. Hernandez, M. Carreras and Lydia E. Kavraki, “Online Multilayered Motion Planning with Dynamic Constraints for Autonomous Underwater Vehicles”
- Journal, book or conference: IEEE International Conference on Robotics and Automation (ICRA). (Nominated for the ICRA 2019 Best Student Paper Award)
- Year: 2019
- Authors and title: E. Vidal, N. Palomeras, K. Istenic, J. D. Hernandez and M. Carreras, “Two-Dimensional Frontier-Based Viewpoint Generation for Exploring and Mapping Underwater Environments”
- Journal, book or conference: Sensors. Vol. 19, no. 6, p. 1460
- Year: 2019

Participation in research projects through contract or scholarship associated with the project:

Title: Software development for the European project PANDORA (Persistent Autonomy through learNing, aDaptation, Observation and Re-plAnning - PANDORA, reference FP7-ICT-2011-7-288273)

Institution: University of Girona

Period: 15/06/2012 a 15/09/2012

Project leader: Salvi Mas, Joaquin

Title: Scholarship to participate in the EURATHLON European robotics competition as a member of the winning team of the University of Girona. The competition took place in La Spezia (Italy), Centre for Maritime Research and Experimentation (CMRE)

Institution: University of Girona

Period: 29/09/2014 a 03/10/2014

Project leader: Carreras Perez, Marc

Scholarships:

Institution: University of Girona

Name of the scholarship: "Beca de transferencia e innovación (BTI)"

Period: 01/11/2012 to 30/06/2013

Institution: Spanish Education Ministry

Name of the scholarship: "Beca de colaboración"

Period: 01/11/2013 to 30/06/2014

Institution: University of Girona

Name of the scholarship: "Convenio de cooperación educativa"

Period: 01/09/2013 to 30/06/2014

Institution: European Commission

Name of the scholarship: Erasmus Mundus funding to study the VIBOT Master Course

Period: 01/09/2014 to 31/08/2016

Institution: Spanish Education Ministry

Name of the scholarship: "Ayuda de Formación de Profesorado Universitario (FPU)"

Period: 2015 to 2019

Institution: Spanish Education Ministry

Name of the scholarship: "Beca Estancia Breve (FPU)"

Period: 2017

Seminars, workshops and tutorials:

Name of the event: Tutorial "SPARUS II AUV Software (ROS based) and Hardware" teaching ROS and Sparus II Software Architecture in the Workshop on Marine Sensors and Manipulators
Place: Las Palmas de Gran Canaria
Year: 2015
Institution/Organizer: PLOCAN – Plataforma Oceánica de Canarias
Type: Teaching in workshop

Name of the event: Summer School 2nd Field Training Workshop in Underwater Robotics, TRIDENT European project
Place: Sóller, Mallorca
Year: 2012
Institution/Organizer: University of Balearic Islands (UIB)
Type: Workshop attendance

Name of the event: Sparus II tutorial for 4 European teams in the context of the European project EURATHLON
Place: University of Girona
Year: 2014
Institution/Organizer: University of Girona
Type: Teaching in tutorial

Name of the event: IFAC Workshop on Navigation, Guidance and Control of Underwater Vehicles (NGCUV 2015)
Place: University of Girona
Year: 2015
Institution/Organizer: University of Girona
Type: Workshop attendance

Other:

Other collaborations: AUV (Autonomous Underwater Vehicle) operator and programmer in the MORPH European project in Toulon (France) in 2013 and in St. Feliu de Guíxols (Spain) in 2014