

RESEARCH PROGRAM NO. 1

The assessment criteria for the qualifications and the interview will be affixed on 12.6.2019 at 11.00 in Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 12.6.2019 at 16.00 in Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Dodecaneso 35, Genova.

The interview will be held on 13.6.2019 at 14.00 in Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Dodecaneso 35, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call) promptly contacting Prof.ssa Nicoletta Noceti via the email address: nicoletta.noceti@unige.it

Scientific coordinator: Prof. Nicoletta NOCETI

NO. 1 research fellowship - Duration 2 years – Biennial pre-tax amount: € 54.043,00

Title: Usability and efficiency of advanced machine learning in biomedical contextes

Description: In this research activity we will consider the development of innovative systems for a technological support to the design of personalized healthcare. More specifically, this project will aim at developing data analysis functionalities in an end-to-end distributed system. Key elements of this work will be the development and integration of information processing methods based on Machine Learning. The large availability of structures, heterogeneous and temporal data will be the trigger for the design of methods to learn models that will be the basis of knowledge used by clinicians so devise personalized and preventive data-drive healthcare.

Scientific disciplinary sector: INF/01 INFORMATICA

Place: Dipartimento interscuola di Informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:

Laurea V.O. in Informatica, Laurea Specialistica della classe 23/S Informatica, 35/S Ingegneria informatica, Laurea Magistrale della classe LM-18 Informatica, LM-32 Ingegneria informatica.

Subjects of the interview:

- Principles of data processing and science
- Elements of Machine Learning

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 2

The assessment criteria for the qualifications and the interview will be affixed on 10.6.2019 at 8.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 10.6.2019 at 14.30 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

The interview will be held on 10.6.2019 at 15.00 in Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA), Via Montallegro 1, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Giovanni BESIO

NO. 1 research fellowship - Duration 2 year – Biennial pre-tax amount: € 54.043,00

Title: Development and validation of weather-marine modeling for navigation safety

Description: The research activities, to be developed within the SINBAD project, will cover the study of the performance scalability of the WRF meteorological model compared to the latest generation hardware architectures made available by Amazon Web Services Cloud Computing (AWS). The main objective is the identification of the optimal number of nodes to be used in parallel computing. Once the optimal configuration has been identified, we will proceed with the other specific objectives: 1) production of meteorological fields to force wave propagation models offshore and below the coast; 2) production of meteorological fields to force circulation models.

Once these phases have been completed, the research activities involve the export of data in web-compliant formats in order to create a data infrastructure capable of supporting tourist navigation through innovative "intelligent" automation functions.

Scientific disciplinary sector: ICAR/02 COSTRUZIONI IDRAULICHE E MARITTIME E IDROLOGIA

Place: Dipartimento di Ingegneria Civile, Chimica e Ambientale (DICCA)

Required degree:

Laurea V.O. in Fisica, Ingegneria Civile, Ingegneria per l'ambiente e il territorio, Laurea Specialistica delle classi 20/S Fisica, 28/S Ingegneria civile, 38/S Ingegneria per l'ambiente e il territorio, Laurea Magistrale delle classi LM-17 Fisica, LM-23 Ingegneria civile, LM-35 Ingegneria per l'ambiente e il territorio

Subjects of the interview:

Fluid Mechanics, Geophysical Fluid Dynamics, Numerical Methods and Numerical Models

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 3

The assessment criteria for the qualifications and the interview will be affixed on 11.6.2019 at 09.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Montallegro 1, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 11.6.2019 at 14.00 Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Montallegro 1, Genova.

The interview will be held on 11.6.2019 at 15.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via Montallegro 1, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call) promptly contacting Prof. Stefano Gaggero on the phone number +39 010 3352389 or via the email address: stefano.gaggero@unige.it

Scientific coordinator: Prof. Stefano GAGGERO

NO. 1 research fellowship - Duration 2 year – Biennial pre-tax amount: € 52.331,40

Exclusive destination of the research fellowship to candidates who are 29th years old or below that age at the date of 15.6.2018 (publication notice of public date n. 422 of 13.6.2018 of Regione Liguria)

Title: Development of numerical tools for the design and analysis of ESD – Energy Saving Devices suitable for marine applications

Description: The proposed activity deals with the development of appropriate design and analysis strategies, based on optimization, for Energy Saving Devices suitable for marine application on semi-displacing and planning hulls. In particular, the activity will be focused on:

- A literature review of most promising ESD for marine application
- A numerical analysis of given configuration to assess possible improvements of the propulsive efficiency
- The development of a design tool to customize ESD for specific applications (depending on hull shape, rudder or propeller type for instance)

Scientific disciplinary sector: ING/IND 01 ARCHITETTURA NAVALE

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

Required degree:

Laurea V.O. in Ingegneria Navale, Laurea Specialistica della classe 37/S Ingegneria navale, Laurea Magistrale della classe LM-34 Ingegneria navale.

Subjects of the interview:

ESD functioning concepts, Numerical approaches for the solution of RANS equations (and relative issues), Approaches for the definition of appropriate computational meshes (and relative issues), Numerical Optimization, Development of dedicated solvers in StarCCM+ / OpenFOAM environment.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 4

The assessment criteria for the qualifications and the interview will be affixed on 11.6.2019 at 12.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 11.6.2019 at 16.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

The interview will be held on 12.6.2019 at 10.00 in Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN), Via all'Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call) promptly contacting Prof. Maurizio Valle via the email address: maurizio.valle@unige.it

Scientific coordinator: Prof. Maurizio VALLE

NO. 1 research fellowship - Duration 2 years – Biennial pre-tax amount: € 52.331,40

Exclusive destination of the research fellowship to candidates who are 29th years old or below that age at the date of 15.6.2018 (publication notice of public date n. 422 of 13.6.2018 of Regione Liguria)

Title: SCOONER AR for the "Development of an intelligent system for the management of shipwrecks at sea through integration of IoT, Machine Learning, Artificial Intelligence and Edge Computing on board and at sea"

Description: The research will address the development of an innovative platform for emergency management in the event of shipwreck during the evacuation of passengers, as well as the support for the recovery of missing persons. The addressed HW / SW solution targets the integration and orchestration of swarms of new generation "smart" devices - buoys, lifeboats, life jackets, personal devices - made intelligent thanks to the integration of environmental and / or wearable sensors with AI "edge" and machine learning in an IoT (Internet of Things) perspective. Aspects related to the use of FPGAs, neural chipsets and innovative methods for data tracking / certification will also be addressed.

Scientific disciplinary sector: ING-INF/01 ELETTRONICA

Place: Dipartimento di Ingegneria Navale, Elettrica, Elettronica e delle Telecomunicazioni (DITEN)

Required degree:

Laurea V.O. in Ingegneria Elettrica, Ingegneria Elettronica, Ingegneria Informatica, Ingegneria delle Telecomunicazioni, Fisica, Laurea Specialistica delle classi 30/S Ingegneria delle Telecomunicazioni, 31/S Ingegneria Elettrica, 32/S Ingegneria Elettronica, 35/S Ingegneria Informatica, 20/S Fisica, Laurea Magistrale delle classi LM-27 Ingegneria delle Telecomunicazioni, LM-28 Ingegneria Elettrica, LM-29 Ingegneria Elettronica, LM-32 Ingegneria Informatica, LM-17 Fisica.

Subjects of the interview:

Internet of Things, Artificial Intelligence/Machine Learning, Edge Computing, Distributed Ledger Technologies, embedded electronic systems, C/C++ programming languages, FPGA e VHDL.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 5

The assessment criteria for the qualifications and the interview will be affixed on 16.9.2019 at 09.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 16.9.2019 at 12.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The interview will be held on 16.9.2019 at 15.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call) promptly contacting Prof.ssa Michela Robba on the phone number +39 3805105692 or via the email address: michela.robba@unige.it

Scientific coordinator: Prof.ssa Michela ROBBA

NO. 1 research fellowship - Duration 2 years – Biennial pre-tax amount: € 53.233,40

Exclusive destination of the research fellowship to candidates who are 29th years old or below that age at the date of 15.6.2018 (publication notice of public date n. 422 of 13.6.2018 of Regione Liguria)

Title: Definition and Implementation of an energy management system to reduce costs and consumes in interconnected buildings and polygeneration microgrids

Description: The research activity will be developed in collaboration with companies participating to the PICK UP project of the Energy and Innovation Pole (EASS) and regard the following research topics: study of a tool for energy management (EMS) that is open, flexible and able to manage real time events; development of optimization models; study on predictive models; analysis of the application of the proposed methods and tools to large scale systems.

Scientific disciplinary sector: ING-INF/04 AUTOMATICA

Place: in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:

Laurea Specialistica delle classi 31/S Ingegneria Elettrica, 35/S Ingegneria Informatica, 33/S Ingegneria Energetica e Nucleare (Energy Engineering), 32/S Ingegneria elettronica, 34/S Ingegneria gestionale, 36/S Ingegneria Meccanica, 23/S Informatica, Laurea Magistrale delle classi LM-28 Ingegneria Elettrica, LM-32 Ingegneria Informatica, LM-30 Ingegneria Energetica e Nucleare (Energy Engineering), LM-29 Ingegneria elettronica, LM-31 Ingegneria gestionale, LM-33 Ingegneria Meccanica, LM-18 Informatica.

Subjects of the interview:

Simulation and optimization of sustainable energy systems, smart grid, polygeneration microgrids and interconnected buildings; mathematical programming; distributed optimization; data analysis and elaboration; predictive models.

RESEARCH PROGRAM NO. 6

The assessment criteria for the qualifications and the interview will be affixed on 11.6.2019 at 09.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 11.6.2019 at 13.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

The interview will be held on 11.6.2019 at 14.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Via Opera Pia 13, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Pierpaolo BAGLIETTO

NO. 1 research fellowship - Duration 2 years – Biennial pre-tax amount: € 76.188,00

Title: Hyperledger enabled Distributed Data Space.

Description: Study, Design and Development of software platforms, based on the Data Distribution Systems and Permissioned Blockchain technologies applied to the management and the distribution of data related to the logistics and sea ports processes, to the tracing of goods in real time, to the automated exchange of documents.

A specific attention will be dedicated to the analysis of the Data Distribution related to the requirements for transparency, tracing, security, availability in real time and trust of data.

The study will be also oriented to the use of exchange and distribution systems based on tables and their simple and dynamic integration with information systems and office automation tools.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Centro Interuniversitario di ricerca sull'Ingegneria delle Piattaforme Informatiche (CIPI)

Required degree:

Laurea Magistrale della classe LM-32 Ingegneria informatica.

Subjects of the interview:

Computer programming with Java JEE e C# frameworks. Design and development of distributed software platforms based on the Distributed Ledger technologies. Paradigms and standards for the integration of systems at the application level, protocols platform s and open standards in the field of the Internet of Things and of Service Composition. Software Platforms for virtualization and scalability.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 7

The assessment criteria for the qualifications and the interview will be affixed on 10.6.2019 at 10.00 in Centro Interuniversitario sull'Ingegneria delle Piattaforme Informatiche (CIPI), Via Opera Pia 11A, Genova.

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 10.6.2019 at 14.30 in Centro Interuniversitario sull'Ingegneria delle Piattaforme Informatiche (CIPI), Via Opera Pia 11A, Genova.

The interview will be held on 10.6.2019 at 15.00 in Centro Interuniversitario sull'Ingegneria delle Piattaforme Informatiche (CIPI), Via Opera Pia 11A, Genova.

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

Scientific coordinator: Prof. Pierpaolo BAGLIETTO

NO. 1 research fellowship - Duration 2 years – Biennial pre-tax amount: € 54.043,00

Exclusive destination of the research fellowship to candidates who are 29th years old or below that age at the date of 15.6.2018 (publication notice of public date n. 422 of 13.6.2018 of Regione Liguria)

Title: Usable Security for IoT- A development of a framework for studying and developing new methodologies and new mechanisms of certification and statement

Description: The research activity will focus on usable security for IoT systems; this will involve the study, design and implementation of novel authentication and attestation methodologies and the study, design and implementation of novel, possibly bio-inspired methodologies and tools for the analysis of the security of complex IoT systems and of the data flowing through them.

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Centro Interuniversitario di ricerca sull'Ingegneria delle Piattaforme Informatiche (CIPI)

Required degree:

Dottorato di ricerca in Ingegneria Informatica o Informatica

Subjects of the interview:

Security in IoT systems. More in details, mechanisms and methodologies for usable authentication and attestation and novel methodologies and tools for the modeling and analysis of security of nodes and data flows in complex IoT systems.

The candidate will need to prove his/her knowledge of the English language.

RESEARCH PROGRAM NO. 8

The assessment criteria for the qualifications and the interview will be affixed on 27.9.2019 at 9.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Viale F. Causa 15, Genova

The results of the qualification assessment as well as the names of the candidates admitted to the interview will be affixed on 27.9.2019 at 12.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Viale F. Causa 15, Genova

The interview will be held on 27.9.2019 at 14.00 in Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS), Viale F. Causa 15, Genova

Such a notice is equivalent to notification to all intents and purposes. All the candidates, who have not received notification of their exclusion, must sit for the exam, without prior notice, at the examination centre.

As regards candidates, who are not resident or domiciled in Italy, and those, who are resident or habitually domiciled at a distance of more than 300 Km from the selection centre, the interview, if requested, can also be held by electronic means (SKYPE video conference call) promptly contacting Prof. Marco Maratea on the phone number +39 3477608621 or via the email address: marco@dist.unige.it

Scientific coordinator: Prof. Marco MARATEA

NO. 1 research fellowship - Duration 2 years – Biennial pre-tax amount: € 54.043,00

Title: Pattern recognition on healthcare data and processes

Description: This project concerns the use of artificial intelligence in the clinical-health field. The activity is part of a large innovation project, a part of which consists in the realization of the RIPE platform.

The areas of use and the effects of the activity will be numerous, ranging from predictive data analysis (predictive diagnosis, risk stratification) to automated systems of planning and scheduling able to incorporate these algorithms.

Data mining techniques will be used for the extrapolation and analysis of data in the field of health big data, and subsequently, artificial intelligence techniques will be used (through the use of languages of knowledge representation as well as technologies of data analytics).

Scientific disciplinary sector: ING-INF/05 SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI

Place: Dipartimento di informatica, bioingegneria, robotica e ingegneria dei sistemi (DIBRIS)

Required degree:

Laurea V.O. in Ingegneria Informatica, Informatica, Laurea Magistrale delle classi LM-18 Informatica, LM-32 Ingegneria Informatica, o interclasse LM-25/LM-32 (Robotics engineering).

Subjects of the interview:

Programming languages, knowledge representation and reasoning languages, Artificial Intelligence methodologies

The candidate will need to prove his/her knowledge of the English language.