## **Curriculum Vitae**

## **Personal information**

First name(s) / Surname(s)

**Enrico Duo** 

Address(es)

Via Saraceno 21 Piano 1 Interno 1 Ferrara 44121

Italy

Telephone(s)

Mobile(s)

+39 3332721661

+31 (0)686222905 (NL) +88 (0)1793315597 (BD)

E-mail enrico.duo@student.unife.it

> enricoduo@hotmail.it (use only upon agreement) (use only upon agreement)

enrico.duo@pec.it

enrico.duo Skype

Nationality Italian

Date of birth 23rd January 1988

> Gender Male



Civil and Environmental Engineering

Coastal Research **Developing Countries** European Project Field Measurements Geomorphology Hydro-morphodynamics

International Research Mountaneering **Numerical Modeling** 

# Desired employment / Occupational field

## International Research in Civil and Environmental Engineering - Coastal Engineering Research

## Work experience

Dates

September 2014 - December 2015

Occupation or position held

Collaborator within Risc-KIT EU FP7 project

Main activities and responsibilities

Numerical modeling, data compilation and analysis, field missions

Name and address of employer Consorzio Futuro in Ricerca

Via Saragat, 1, Blocco B, Piano 1 Ferrara FE 44122

Italy

Type of business or sector

Coastal Engineering Research

Dates April-July 2014

Occupation or position held

Collaborator within Risc-KIT project

Main activities and responsibilities

Data compilation and analysis

Name and address of employer Consorzio Ferrara Ricerche

Via Saragat, 1, Blocco B, Piano 1

Ferrara FE 44122

Italy

Type of business or sector

Coastal Engineering Research

Dates 2008-2010

Occupation | Private lessons

Subjects: scientific, mainly mathematics and physics

Student's education: scientific high school

Frequency: regular for some months, otherwise occasionally

Dates October 2008

Occupation or position held | Waiter and kitchen assistant

Main activities and responsibilities | Waiting services and food preparation

Name and address of employer Roadhouse Grill Italia S.r.l.

Via Eridano 2/D Ferrara FE 44122

Italy

Type of business or sector | Catering

Dates August-September 2007

Occupation or position held

Main activities and responsibilities

Name and address of employer

Ferrari Mirco

Via Ponterigo 110 Ferrara FE 44124

Italy

Type of business or sector | Agriculture

Dates | April-July 2006

Occupation or position held Cook assistant, waiter and beach assistant

Main activities and responsibilities Food preparation, waiting services and beach activities

Name and address of employer Bagno Faro S.a.S. di Marchetti Sergio & C.

Via Jacopo della Quercia Lido di Spina FE 44022

Italy

Type of business or sector | Tourism and catering

Dates August-September 2005

Occupation or position held

Main activities and responsibilities

Name and address of employer

Ferrari Mirco

Via Ponterigo 110 Ferrara FE 44124

Italy

Type of business or sector | Agriculture

Dates August-September 2004

Occupation or position held

Main activities and responsibilities

Name and address of employer

Bottoni Ugo

Vis. del Parce 4

Via del Parco 41 Ferrara FE 44124 Italy

Type of business or sector | Agric

Agriculture

**Education and training** 

Dates

2014-2017

Title of qualification awarded

PhD Degree in Earth Science

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al skills | Coastal Morphodynamics and Coastal Risk

Principal subjects/occupational skills covered

Field work: DGPS and Drone surveys, pressure transducers, sediment sampling, interviews, etc...;

Numerical modelling: Delft3D, XBeach, FEWS and Bayesian Networks.

Name and type of organisation providing education and training

Università degli Studi di Ferrara - University of Ferrara

Via Savonarola 9 Ferrara FE 44121

Italy

Level in national or international classification

| -

Dates 2010-2014

Title of qualification awarded

Master Degree in Civil Engineering – Mark: 110/110

Principal subjects/occupational skills covered

Coastal dynamics

Hydraulic and hydrodynamic modeling

Modeling, designing and monitoring of hydrologic and hydraulic systems

Monitoring and remote sensing

Geotechnics

Geology of earthquakes Structures in seismic zone

Thesis: Development of a Delft3D tidal model of the Bay of Bengal and tide measurements along

Sandwip Island (Bangladesh)

Supervisor(s): Prof. Paolo Ciavola (University of Ferrara), Ir. Ap van Dongeren and Ir. Deepak Vatvani

(Deltares, Delft NL)

Name and type of organisation providing education and training

Università degli Studi di Ferrara - University of Ferrara

Via Savonarola 9

Ferrara FE 44121

Italy

Level in national or international classification

on

Dates October 2013 – June 2014

Title of qualification awarded

Internship and MSc Thesis projects

Principal subjects/occupational skills

Coastal morphodynamics, numerical modeling

Report: MSc Thesis - Development of a Delft3D tidal model of the Bay of Bengal and tide

measurements along Sandwip Island (Bangladesh)

Supervisor(s): Prof. Paolo Ciavola (University of Ferrara), Ir. Ap van Dongeren and Ir. Deepak Vatvani

(Deltares, Delft NL)

Funding: Erasmus Placement scholarship (3 months)

Name and type of organisation providing education and training

Deltares

oviding education and training | Boussinesqweg 1

2629 HV Delft Postbus 177 2600 MH Delft

tel: +31 (0)88 335 8273 fax: +31 (0)88 335 8582

Level in national or international

Internship

classification

Dates 2007-2010

Title of qualification awarded

Degree in Civil and Environmental Enginnering – Mark: 110/110 with honor

Principal subjects/occupational skills

**Buildings and Structures** 

Geotechnics

Hydraulics and hydrodynamics Topography and representation

Statistics

Thesis: Structural systems for thermal bridge reduction in balconies

Supervisor(s): Prof. Alessandra Aprile and Prof. Stefano Piva (University of Ferrara)

Name and type of organisation providing education and training Università degli Studi di Ferrara - University of Ferrara

Via Savonarola 9 Ferrara FE 44121

Italy

Level in national or international

classification

2002-2007 Dates

Title of qualification awarded

Scientific High School Diploma - Mark: 86/100

Principal subjects/occupational skills

Mathematics, physics chemistry and natural sciences

Italian literature, latin, hystory and phylosophy

English

Arts

Name and type of organisation providing education and training Liceo Scientifico "A. Roiti" Viale Leopardi 64 Ferrara FE 44121

Italy

Level in national or international

classification

# Personal skills and competences

Mother tongue(s)

Italian

Other language(s)

Self-assessment

European level (\*)

**English** 

Certification

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2/C1	Upper intermediate/ Advanced	C1	Advanced	B2	Upper intermediate	B2	Upper intermediate	B2/C1	Upper intermediate/ Advanced
			IELTS Certifica	te - Aca	demic Module -	22 <sup>nd</sup> J	une 2013		

(\*) Common European Framework of Reference for Languages

Social skills and competences

I have good aptitude in cultural exchange in both national and international contests.

Organisational skills and competences

I am a clear worker and I do the best under pressure. I can work in group but I prefer to work alone on specific problems and then compare results with partners in order to check progresses and plan next steps of job activities. If necessary I can organize the team and plan the activities.

During my abroad stay in Deltares (Delft NL) from Oct. 2013 to June 2014 I improved my organisational skills as well as group management ones.

#### Computer skills and competences

I usually use Windos OS in different versions and I have advanced expertise in Microsoft Office packs (mainly Word, Excell and PowerPoint). I can use, as normal user, Photoshop, Skype, PDFCreator and several browsers.

The majority of the following softwares has been studied and applied during my university studies:

Matlab advanced use Autocad academic use **HEC-RAS** academic use **HEC-HMS** academic use **EPANET** academic use **EPA SWMM** academic use Star\*Net academic use **ENVI** academic use Quantum GIS academic use Straus7 academic use

I am interested in Matlab code and its practical applications in different fields of civil and environmental engineering. I am able to write different useful algorithms about designing and managing civil and natural hydraulic systems, optimization problems and other fields.

From Oct. 2013 to June 2014 I worked as MSc student in Deltares (Delft NL) learning and focusing on Delft3D hydrodynamics modelling. During this period I improved my Matlab skills and learned to use OpenEarth and other useful tools.

Other numerical models/software used in coastal research: XBeach, FEWS, Bayesian Networks.

#### Other skills and competences

I am keen on mountaineering, for different activities. I usally do free and ice climbing, skiing and trekking, mainly in the Dolomites (Italy) but also in other countries. These activities improved my stressful situations management and concentration skills. I am member of the Italian Alpine Club (CAI - Club Alpino Italiano) since 2012.

Driving licence

Italian driving licence - Cat. B

## Additional information

## Participation in research projects

### 2013 - in progress

Project: Risc-KIT EU FP7

Main activities: data compiling and analysis, modelling and field measurements for WP1 Sandwip

Island (BD) Case Study

Main coordinator(s): Ir. A. van Dongeren (Deltares, Delft NL)

WP coordinator(s): Prof. P. Ciavola (Consorzio Futuro in Ricerca, Italy)

Promoter: EU and project partners

#### 2011 - in progress

Project: Respiratory and cardiovascular health in high altitude residents exposed to indoor pollution – SHARE Project

Main activities: field measurements and data analysis

Coordinator: Prof. A. Cogo, Biomedical Sport Studies Center, University of Ferrara, Italy

Promoter: Ev-K2-CNR

#### Research missions

## October 2014 - in progress

Missions in several locations in the Ferrara and Ravenna coasts, Italy

Project: PhD in Earth Science (Unife) and Risc-KIT EU FP7

Main activities: topographic DGPS and Drone surveys, sediment samplings, flooding assessments and interviews

Coordinator: Prof. P. Ciavola, University of Ferrara and Consorzio Ferrara Ricerche, Italy

Promoter: Unife and CFR February-March 2014

Mission in Dhaka, Chittagong and on Sandwip Island (Bangladesh)

Project: Risc-KIT EU FP7 (WP1)

Main activities: tidal and topographic measurements

Coordinator: Prof. P. Ciavola, University of Ferrara and Consorzio Ferrara Ricerche, Italy

Promoter: CFR, WMO and Atlante Rotary Club (scholarship)

#### October 2011

Mission in Pangboche and Phakding, Khumbu Valley, Nepal (4000 and 2800 m a.s.l.)

Project: Respiratory and cardiovascular health in high altitude residents exposed to indoor pollution – SHARE Project

Main activities:metric survey of kitchens and analysis of correlations between ventilation parameters and medical data

Coordinator: Prof. A. Cogo, Biomedical Sport Studies Center, University of Ferrara, Italy

Promoter: Ev-K2-CNR

#### **April 2011**

Mission in Thame, Khumbu Valley, Nepal (3900 m a.s.l.)

Project: Respiratory and cardiovascular health in high altitude residents exposed to indoor pollution Main activities:metric survey of kitchens and analysis of correlations between ventilation parameters and medical data

Coordinator: Prof. A. Cogo, Biomedical Sport Studies Center, University of Ferrara, Italy

Promoter: Ev-K2-CNR

### September 2008

One-week stage at CERN, Geneve, Switzerland

Project: Study about relativistic particles beam handling trough silicon crystal

Main activities: silicon crystal test at SPS monitoring Coordinator: Prof. V. Guidi (University of Ferrara, Italy)

Promoter: INFN

### **Pubblications**

E. Duo, R.M. Bruno, M. Bartesaghi, B. Basnyat, M. Neupane, L. Pomidori, R. Sharma, G.B. Thapa, L. Pratali, and A. Cogo, Indoor pollution in high altitude dwellings: an assessment of affecting factors across some Sherpa villages in the Khumbu region, Nepal, Submitted to Indoor and Built Environment on April 2015.

R.M. Bruno, A. Cogo, L. Ghiadoni, E. Duo, L. Pomidori, R. Sharma, G.B. Thapa, B. Basnyat, M. Bartesaghi, E. Picano, R. Sicari, S. Taddei, L. Pratali, Cardiovascular function in healthy Himalayan high-altitude dwellers, Atherosclerosis, Volume 236, Issue 1, September 2014, Pages 47-53, ISSN 0021-9150, http://dx.doi.org/10.1016/j.atherosclerosis.2014.06.017.

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### Meeting and congress abstracts

R.M. Bruno, A. Cogo, L. Pomidori, E. Duo, M. Bartesaghi, L. Ghiadoni, B. Basnyat, S. Salvadori, E. Picano, and L. Pratali, Exposure to indoor air pollution induces endothelial dysfunction in nepalese high-altitude dwellers, Eur Heart J (2013) 34(1):doi:10.1093/eurheartj/eht308.P2530

#### Meetings and congresses

## 8th - 9th May 2014

Risc-KIT Biannual Meeting

Cripps Court, Magdalene College, Cambridge, United Kingdom

Role: Attendee

## 17th - 19th September 2014

Coast Esonda 2014

Ferrara Fiere, Ferrara, Italy

Meeting: Le Direttive Acque e Alluvioni, Gestione e tutela della fascia costiera e del mare

Role: Auditor

#### 16th - 18th February 2014

Meeting of the National Coordination Team for the Coastal Inundation Forecasting Demonstration Project for Bangladesh (CIFDP-B), and the Work Package 1 meeting of the EU FP7 Resilience-Increasing Strategies for Coasts - toolKIT (RISC-KIT)

Bangladesh Meteorological Department, Dhaka, Bangladesh

Role: Attendee

# 20th -.22nd November 2013

Risc-KIT Kickoff Meeting

Deltares, Delft, The Netherlands

Role: Attendee

### 19th - 21st September 2012

Coast Expo 2012

Ferrara Fiere, Ferrara, Italy

Role: Auditor

#### 25th November 2011

Il ruolo del geologo nella prevenzione e mitigazione dei rischi costieri

Casa Matha, Piazza Andrea Costa 3, Ravenna, Italy

Role: Auditor

## 28th - 30th September 2011

Coast Expo 2011

Ferrara Fiere, Ferrara, Italy

Role: Auditor

## Workshops and summer schools

## 6th - 10th July 2015

Title: Coast Tools Summer School 2015 - Building up knowledge on Coastal Processes: Principles

and Techniques Location: Faro, Portugal

Coordinators: André Pacheco and Susana Costas, Universidade do Algarve

Promoter: Universidade do Algarve, Algarve, Portugal

#### 14th - 28th September 2013

Title: River Delta System Analysis and Management in Practise (RAMIP)

Location: Jerez de la Frontera, Spain

Coordinator: Prof. J. Heringa, HZ University of Applied Sciences, Vlissingen, The Netherlands

Promoter: EU Erasmus Mundus IP 2012-13

## 26th August - 4th September 2013

Title: Sedyment dynamics and associated risks

Location: Ferrara, Italy

Coordinator: Prof. P. Billi, University of Ferrara Promoter: EU Erasmus Mundus IP 2012-13

## Scholarships

#### 2013-2014

Scholarship: Atlante Rotary Club 2013-14 from University of Ferrara

Motivation: MSc Thesis project in an extra-EU country Amount: used 2750 € out of 3000 € (maximal)

Promoter: Rotary Club

### 2013-2014

Scholarship: Erasmus Placement 2013-14 from University of Ferrara

Motivation: Internship project in an EU country Amount: three monthly payment of 500€

Promoter: EU

#### References

Name: Prof. Paolo Ciavola

Institution/company: University of Ferrara and Consorzio Ferrara Ricerche, Ferrara, Italy

Contact: available on request

Name: Ir. Ap van Dongeren

Institution/company: Deltares, Delft, The Netherlands

Contact: available on request

Name: Dr. Boram Lee

Institution/company: World Meteorological Organization (UN)

Contact: available on request

Name: Prof. Alessandra Aprile

Institution/company: University of Ferrara, Ferrara, Italy

Contact: available on request

Name: Prof. Annalisa Cogo

Institution/company: Biomedical Sport Studies Center, University of Ferrara, Ferrara, Italy

Contact: available on request

Ferrara, 22<sup>nd</sup> September 2014

Enrico Duo