

**PERSONAL INFORMATION** **Alberto Carta**✉ [carta.alberto@gmail.com](mailto:carta.alberto@gmail.com)

💬 Skype cartalberto

Gender Male | Date of birth 15 October 1996 | Nationality Italian

**APPLYING FOR** PhD position ETH**EDUCATION AND TRAINING**2018–present **Top Master in Nanoscience: Rijksuniversiteit Groningen.** ISCED 5A

GPA = 8.7 (Max = 10). Relevant modules: Fundamental and Functional Properties of Nanomaterials, Introduction to the Theory of Condensed Matter, Statistical Mechanics, Many Body Theory, Mesoscopic Physics.

2015-2018 **Bachelor of Science: Materials Science and Nanotechnology Engineering, Politecnico di Milano**

Graduated on July 2018 with 110/110 Cum Laude. Relevant modules: Atomic Physics, Nuclear Physics, Physical Chemistry.

2010-2015 **Scientific High School, Istituto Salesiano Sant'Ambrogio, Milan****HONOURS AND AWARDS**

- Scholarships**
- 2018-present: Top Master in Nanoscience Scholarship, Rijksuniversiteit Groningen
  - 2019: Scholarship for high rating (academic year 2017-2018), Società Cooperativa Farmaceutica, Milan
  - 2018: Scholarship for high rating (academic year 2016-2017), Società Cooperativa Farmaceutica, Milan
  - 2017: Best Freshmen Scholarship of Excellence (academic year 2015-2016), Politecnico di Milano
  - 2017: Scholarship for high rating (academic year 2015-2016), Società Cooperativa Farmaceutica, Milan

- Other**
- 2017: Literary Awards “Caffé Letterario Moak”, second place and youngest author prize.

**ACADEMIC PROJECTS**

**Msc Thesis** Investigation of electronic phase transitions in multi-layered Van der Waals Heterostructures. Supervisor: Prof. J. Ye

**Msc small research project** Simulation of the spectroscopic signature of excitons in triangulene self-assembled H-aggregates. Supervisor: Prof. T.L.C. Jansen.

**Nanoscience research paper course** Review on Materials and Methodologies for Polysulfide Shuttling Mitigation in Lithium Sulfur Batteries. Supervisor: Prof. M. Tromp.

**BSc Thesis** Raman Characterization of silver decorated graphene sheets for sensor application. Supervisor: Prof. V. Russo.

**PERSONAL SKILLS**

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Cambridge Certificate of Proficiency in English (CPE) – 2012					
Spanish	C2	C2	C2	C2	C2
Diploma de español como lengua extranjera nivel C2 (DELE) – 2016					
French	C1	C1	C1	C1	C1
Diplôme d'études en langue française (DELFF) C1 - 2015					
German	B2	B2	B2	B2	B2
Goethe-Zertifikat (B2) - 2016					
Mandarin Chinese	B2	B2	B2	B2	B2
HSK 4 - 2017					
Dutch	Beginner	Beginner	Beginner	Beginner	Beginner
Unassessed					

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

## WORK EXPERIENCE

2017-2018 **Poll-watcher**

2017: Regional Referendum for Autonomy – Lombardy

2018: Regional Elections – Lombardy

## COMPUTER SKILLS

### Academic related

- Good knowledge of Python for scientific programming
- Intermediate knowledge of Matlab
- Basic Knowledge of Autocad
- Proficient in Latex

### Media

- Good knowledge of Adobe Photoshop
- Good knowledge of Autodesk Maya
- Good knowledge of Inkscape
- Proficient in Scribus

## OTHER SKILLS

2014 – **Public Speaking** Public speaking course with focus on mid-large audiences.

**Soft skills** Teamwork and group self coordination were key skills to learn during my various group projects.

**Driving licence** B (car)

## ADDITIONAL INFORMATION

### Extra-curricular activities

- 2018-present: Volunteering as a cook at Free Café Groningen: cooking market leftovers for the less fortunate.
- 2017: Attended Athens international exchange program in Paris (Introductory course in Finite Elements Method)
- 2013-present: German language course.
- 2013-present: Mandarin Chinese language course.
- 2004-2010: Participated in charity activities as a scout and at school (organising baking events, collecting food for the poor).