

## PERSONAL INFORMATION

## Federico Bosio



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🌐 LinkedIn Profile: <https://www.linkedin.com/in/federico-bosio-6b278b137/>

💬 Skype™ – Federico Bosio

Sex Male | Date of birth 21/01/1992 | Nationality Italian

## WORK EXPERIENCE

01/11/2017 - Present

### Ph. D Candidate

Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129

- Development of novel aluminum alloy for Additive Manufacturing (AM)
  - Optimization of the main process parameters for new aluminum AM systems
  - Laboratory activities: metallic 3D printing with EOS M270, material characterization
- Sector Applied research

01/03/2017 - 31/10/2017

### Research Assistant

Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129

- Optimization of the main process parameters of 316L stainless steel for AM
  - Laboratory activities: metallic 3D printing DED, material characterization, porosity evaluation, mechanical tests
- Sector Industrial research

01/12/2016 - 28/02/2017

### Grant holder

Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129

- Development of a procedure to assess the wear amount on cemented carbide tools
- Laboratory activities: correlation between the tool wear and microstructural properties of cemented carbides

Sector Industrial research, Mining and Tunnelling

## EDUCATION AND TRAINING

03/11/2014 – 12/10/2016

### Master of Materials Engineering (2 Years)

Politecnico di Torino, Corso Duca degli Abruzzi 24, 10129

MSc Thesis: The influence of microstructure on abrasive wear resistance of selected cemented carbide grades operating as cutting tools in dry and foam conditioned soil

25/08/2011 – 24/10/2014

### Bachelor of Materials Engineering (3 Years)

Politecnico di Torino, Corso Duca degli Abruzzi 21, 10129

## PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	

English	B2	C1	C1	C1	C1
International English Language Testing System (IELTS)					
French	A2	A2	A1	A1	A2
Diplôme d'études en langue française (DELFI) A2					

#### Communication skills

- **Team working:** I have worked in various research teams and I have played basketball for 7 years
- I have acquired the **determination** and **strength of character** that allowed me to achieve independently the fixed goals
- I developed **self-assessment** and **decision-making** skills thanks to my research work in the academia

#### Organisational / managerial skills

- **Supervisor** of groups of students
- **Good management** of working activities and private life

#### Job-related skills

- **Timeliness, accuracy** and **respect of the deadlines** have been acquired over the years
- Empirical and theoretical knowledge of the Additive Manufacturing process thanks to the use of Selective Laser Melting (SLM) and Directed Energy Deposition (DED) system in Politecnico's laboratories.
- Optimization of process parameters of the DED system with the cooperation of Prima Industrie S.p.A
- Mastery of main facilities for mechanical tests and metallographic characterization of metallic alloys
- Experience on quality assessment of metallic alloys: metallographic preparation and porosity analysis

#### Digital skills

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

#### Operative system

**Microsoft Windows**

#### Text editing

**Microsoft Word** for writing documents, articles and bibliographies with Mendeley Desktop

#### Spreadsheets

**Microsoft Excel, OriginLab, MathLab**

#### Other skills

**Code Blocks, AutoCAD, SolidWorks, ImageJ, Paint.net, PowerPoint, Outlook**

### ADDITIONAL INFORMATION

#### Publications

- The influence of microstructure on abrasive wear resistance of selected cemented carbide grades operating as cutting tools in dry and foam conditioned soil, Nov 2017, Wear, DOI: 10.1016/j.wear.2017.11.002
- A new test device for the study of metal wear in conditioned granular soil used in EPB shield tunneling, Dec 2017, Tunnelling and Underground Space Technology, DOI: 10.1016/j.tust.2017.12.014
- Accelerated Process Parameter Optimization For Directed Energy Deposition Of 316L Stainless Steel, Oct 2018, Conference Paper, EURO PM 2018, Bilbao
- Directed energy deposition of 316L steel: effect of type of powders and gas related parameters, Oct 2018, Conference Paper, EURO PM 2018, Bilbao
- Laser Single Scan Tracks of New Aluminium Alloys Compositions, Oct 2018, Conference Paper, EURO PM 2018, Bilbao
- A time-saving and cost-effective method to process alloys by Laser Powder Bed Fusion, Jun 2019, Materials & Design, DOI:10.1016/j.matdes.2019.107949

#### Conferences

- EURO PM2018, European Powder Metallurgy Conference, Bilbao, Spain
- APICAM 2019, Asia-Pacific International Conference on Additive Manufacturing, Melbourne, Australia

#### Certifications

- Certificate of review for Tribology International and Journal of Testing and Evaluation (ASTM)
- Associate Mechanical Design (Solidworks CSWA), Licence: C-QGMGRA64BA