PERSONAL INFORMATION

Matteo Sciarra

PREFERRED JOB POSITION

Analysis and Design of Space Propulsion Systems

WORK EXPERIENCE

(May 2014 – May 2015)

Research contract

Avio S.P.A.

Via Ariana, km 5,2
00034 Colleferro (Roma) - Italia
Tel. +39 06 97285111

- Analysis and modelization of advanced methods for combustion chamber cooling systems
- Analysis and modelization of combustion chambers operation (steady and transient) with the software Ecosimpro

Business or sector Engineering Department

(June 2013 – December 2013)

Internship

Avio S.P.A.

Via Ariana, km 5,2
00034 Colleferro (Roma) - Italia
Tel. +39 06 97285111

- Development of a Preliminary Design Tool for the dimensioning of a turbopump for spatial use
- Development of a Preliminary Design Tool for the dimensioning of a Dynamic Seal Package of a turbopump

Business or sector Engineering Department

(January 2010 – December 2012)

Winner of students scholarship

Central Library “G. Boaga” of Engineering School at “La Sapienza” University, Rome - Italy

- Reception and information centre for users, consulting and loan services, library material distribution

EDUCATION AND TRAINING

(February 2013 – December 2013)

2nd level Master in Space Transportation System

"La Sapienza" University of Rome – Italy

- **Subjects covered:** Overview of the Launcher System, Mission Analysis, Avionics, Aero-thermo-dynamics, Liquid Rocket Engine Thrust Chambers, Rocket Nozzles, Pump-fed Systems, Solid Rocket Motors, CFD Methods for High Speed Flows, Launcher Design, Structures, Ground Segment, Space Program Management, Launcher System Management
- **Title of Thesis:** Development of a Preliminary Turbopump Design Tool
- **Company Supervisor:** Daniele Liuzzi (Avio)
- **Academic Supervisor:** Francesco Nasuti (La Sapienza)
- **Final Marks:** 110/110

(October 2010 – January 2013)

Master Degree in Space Engineering

"La Sapienza" University of Rome – Italy

- **Subjects covered:** Gasdynamics, Space Flight Mechanics, Space Structures, Space Mission and Systems, Rocket Propulsion, Hypersonics, Liquid Propellant Engines, Space Propulsion, Aerospace Materials, Solid Propulsion Modelling, Turbopump Systems for Liquid Rocket Engines
- **Title of Thesis:** Theoretical-Numerical Analysis of Transcritical Methane Flux in Liquid Rocket Engines Cooling Channels
- **Supervisor:** Marcello Onofri
- **Final Marks:** 106/110

(September 2007 - October 2010)

Bachelor Degree in Aerospace Engineering

"La Sapienza" University of Rome - Italy

- **Subjects covered:** Calculus, Geometry, Informatics and Programming, Chemistry, Physics, Numerical Methods, Aerospace Materials, Electromagnetism, Aerodynamics, Electronics, Applied Mechanics, Structural Mechanics, Aerospace Structures, Aerospace Propulsion, Aircraft Systems, Flight Mechanics
- **Title of Thesis:** Space Trajectories Optimization
- **Supervisor:** Nicola De Divitiis
- **Final Marks:** 110/110 cum laude

(September 2002 – July 2007)

High School Leaving Scientific qualification

"ITIS S. Cannizzaro" Colleferro (RM) - Italy

Scientific- Technological High School "Progetto Brocca"

- **Final Marks:** 100/100 cum laude

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	B2	B2	B2
French	B1	B1	A2	A2	A2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Good communication skills gained in everyday life, extra-national travel and during permanence in Central Library “G. Boaga”

Organisational / managerial skills

- Proficient in teamwork and private work
- Attitude for problem solving
- Ability of face new challenges
- Constancy in undertaken work

Job-related skills

- Good knowledge of Matlab, Adina, CFD++ and EcosimPro software
- Good knowledge of Fortran and C++ programming languages
- Willingness and ability to learn new software, codes and languages

Computer skills

- European computer Driving Licence (ECDL)
- Good knowledge of Microsoft Word, Excel, Access, PowerPoint
- Good knowledge of UNIX Operative System

Other skills

- Author for the online magazine “EverySpace Magazine”
- Construction of naval wooden models
- Design and construction of small robots
- 10 days summer school at Frascati National Labs of National Institute of Nuclear Physics (INFN) about “Planning and management with UNIX system for experiment data that produce more than 1200 terabytes”

Driving licence

- Driving licence type B