Matteo **Di Pirro**
SOFTWARE ENGINEER

Via F. Lippi 46, Padua, Italy

(+39) 345 4926 222 | matteodipirro@gmail.com | mdipirro.github.io | mdipirro | matteo-di-pirro

Education

KU Leuven	*Leuven, Belgium*
ERASMUS STUDENT	*Sept. 2017 - Feb. 2018*

Università degli Studi di Padova — *Padua, Italy*
MSc IN COMPUTER SCIENCE — *Sept. 2016 - Sept. 2018*
- Thesis: How Solid is Solidity? An In-depth Study of Solidity's Type-Safety.
- Majors
  - Design and development of reliable systems
  - Software and theory of programming languages
- Magna cum Laude

Università degli Studi di Padova — *Padua, Italy*
BSc IN COMPUTER SCIENCE — *Sept. 2013 - Sept. 2016*
- Thesis: Management of an Identity and Access management cloud-based system.
- Magna cum Laude

ITIS Francesco Severi — *Padua, Italy*
HIGH SCHOOL — *Sept. 2018 - June. 2013*
- Thesis: Speech recognition in Android.
- Mark 100/100

Skills

Programming	Node.js, Python, Java, C++, Solidity, Haskell, JavaScript
Databases	MySQL, MongoDB
Versioning	Git
Documents	LaTeX
Languages	Italian (mother tongue), English (fluent), French (beginner)

Work Experience

Athesys SRL — *Padua, Italy*
SOFTWARE ENGINEER — *May. 2016 - Jul. 2016*
- Designed an overall microservices-based architecture cooperating with an existing environment.
- Developed a module for an Identity and Access Management cloud-based (IDaaS) system (Monokee).
- Implemented several RESTful APIs in Node.js, in particular using the Express.js library and storing data in a MongoDB database.
- Developed a built-in logging system to monitor user activities.

CNR (Consiglio Nazionale delle Ricerche) - Institute of Biomedical Engineering — *Padua - Italy*
PROGRAMMER — *Jun. 2012 - Jul. 2012*
- Designed and developed a basic content management system (CMS) for an European research group.
- Implemented both front-end (HTML, CSS) and back-end (PHP, JavaScript, MySQL).

Selected projects

LinQedIn — *Università degli Studi di Padova*
- LikedIn-like local social network with basic client and admin functionality
- Clients could sign-up, manage their profile and their contacts network and search for people
- Permission-based search engine: different filters available for different types of users
- Admins could manage the application with no restrictions

Haskell Secure Library   *Università degli Studi di Padova*

- Investigation on language-based information security
- The Haskell library I developed enforced fine-grained data integrity and confidentiality properties

18F97J60 Microchip   *KU Leuven*

- Basic timer counting time and flashing LEDs when scheduled
- DHCP relay forwarding packets from/to clients and servers. It was developed using the TCP/IP Microchip's stack.

Football Fact-Checking   *KU Leuven*

- The application was meant to validate claims and check facts related to football. Three were the components: language analysis, categorization and actual fact checking.
- Some facts were hard-coded, whereas others were taken from Twitter.
- The fact checking algorithm used a built-in knowledge graph.

Columbus   *Università degli Studi di Padova*

- Simulation of the very first stage of the startup lifecycle
    - Busines idea
    - Market and competitors analysis
    - Business mdoel definition
    - Investor pitch

Publications

PROCEEDINGS OF INTERNATIONAL CONFERENCES

- Di Pirro, Matteo and Conti, Mauro and Lazzeretti, Riccardo. "Ensuring information security by using Haskell's advanced type system". In *Security Technology (ICCST), 2017 International Carnahan Conference on*, pp 1–6. IEEE, 2017

THESIS

- Di Pirro, Matteo. "*How Solid is Solidity? An In-dept Study of Solidity's Type Safety*". Master Thesis. Università degli Studi di Padova, 2018