





## Curriculum vitae

### PERSONAL INFORMATION

#### Musumeci, Carmelo Mirko

 Via Federico Fellini 43/E, 70023, Gioia del Colle, Bari, Italy

 +39 328 8238223

 [cm.musumeci@criluge.net](mailto:cm.musumeci@criluge.net)

 [studiomusumeci.com](http://studiomusumeci.com)

 [linkedin.com/in/mirkochip](https://www.linkedin.com/in/mirkochip)

 [github.com/mirkochip](https://github.com/mirkochip)

Gender Male | Date of birth 20.11.1984 | Nationality(-ies) Italian

### Occupational field

#### Software Automation Engineer

### WORK EXPERIENCE

#### Dates

January 2020 - Onwards

#### Work experience

Lead Software Automation Engineer @ Juniper Networks

#### Main activities and responsibilities

- Actively involved in NIMS (Next Generation IP Multimedia Subsystem) and NGNP (Next Generation Number Portability). Both projects aimed to achieve the Deutsche Telekom Cloud VNF automation: deployment/update/upgrade/teardown of VMs (providing network services) through CI/CD pipelines.

- Designing, building and maintaining Python (medium to complex) applications and Ansible playbooks packaged into Docker containers consumed by GitLab pipelines.

- Building (complex) GitLab pipeline workflows. - Integrating REST APIs. - Coding Unit Tests aiming to guarantee adequate software quality/code coverage.

- Leading small groups of 2-3 junior software engineers in designing and building the optimal IT solutions to satisfy the customer requirements.

- While introducing the "dry-run" capability, in order to test the pipeline workflows from feature branches without hitting the target systems, I contributed to the [Python Dryable](#) project.

More details here: [Voice telephony from the cloud](#).

#### Name and address of employer

X-Team International Pty Ltd. PO Box 537, Chelsea, VIC 3196, Australia

#### Website

[x-team.com](http://x-team.com)

#### Type of business or sector

Telecommunications

<p>Dates</p> <p>Work experience</p> <p>Main activities and responsibilities</p>	<p>September 2018 - January 2020</p> <p>Software Automation Engineer @ Klopotek Italia</p> <ul style="list-style-type: none"> <li>- Software automation baker: designing, building and maintaining KDM (Klopotek Deployment Manager), a Web Application aiming to simplify the installation and the upgrade of Klopotek STREAM applications. The front-end of KDM is based on Angular, while the back-end is written in JAVA. The web application is deployed in a WildFly application container.</li> <li>- Release manager: responsible for building and deploying the Klopotek STREAM applications delivered by the Klopotek development department in both Lab and Live environments using Jenkins pipelines.</li> <li>- Continuous and punctual application performance tuning, empowered by performance dashboards (based on ELK stack and integrated in KDM) reporting the status of the application servers. Please note my contribution at <a href="#">Elasticsearch/Beats</a> project.</li> </ul>
<p>Name and address of employer</p> <p>Website</p> <p>Type of business or sector</p>	<p>Klopotek Software &amp; Technology Services Italia s.r.l. Via G. Fara 26, 20124, Milan, Italy</p> <p><a href="http://klopotek.com">klopotek.com</a></p> <p>Publishing</p>
<p>Dates</p> <p>Work experience</p> <p>Main activities and responsibilities</p>	<p>May 2016 - September 2018</p> <p>Software Engineer @ KPN</p> <ul style="list-style-type: none"> <li>- I took part of the KPN Digital Engine team, responsible for the Digital Transformation of the legacy KPN software applications serving 2+ millions of end customers in The Netherlands.</li> <li>- Decommissioning a legacy monolith software owned by KPN Digital Engine team, already obsolete and almost impossible to maintain, creating a micro-services oriented infrastructure based on Python and Django REST framework.</li> <li>- As part of the KPN microservices infrastructure, I took part of the KPN Compleet team: Designing, building and maintaining the business logic of KPN Compleet, a KPN program having hundreds of thousands of subscribers. Coded northbound and southbound endpoints, as part of the microservices integration through REST APIs, having high quality and high availability as must.</li> <li>- Coded unit tests covering every single line of code I aimed to merge into master branch (being production ready) and shipped along with every pull request.</li> <li>- Peer reviews shifts - On call duty shifts</li> </ul>
<p>Name and address of employer</p> <p>Website</p> <p>Type of business or sector</p>	<p>KPN, Teleportboulevard 121, 1043 EJ Amsterdam, Netherlands</p> <p><a href="http://kpn.com">kpn.com</a></p> <p>Telecommunications</p>
<p>Dates</p> <p>Work experience</p> <p>Main activities and responsibilities</p>	<p>June 2012 - May 2016</p> <p>Software Engineer @ European Patent Office</p> <ul style="list-style-type: none"> <li>- In European Patent Office I took part of the DFP (Data Flow Platform) and DFA (Data Flow Adaptation) team, owning an ETL platform based on Spring stack aiming to process patent and non patent literature, in order to build a digital archive being browsed by the EPO examiners.</li> <li>- Development of DFP processes written using Domain Specific Language and Groovy language.</li> <li>- Development of the "ISP Service Adaptation" Dashboard: used GRAILS to develop a web based dashboard, displaying the activities planning and their status for a service manager team at the EPO. The basic dataflow is: reading data from JIRA using the Atlassian REST APIs, storing the required data in a IBM DB2 database and presenting it through Grails templates.</li> <li>- Development of the "ISP Document Manager": used GRAILS combined with Apache Camel to develop a document workflow management system which aims to handle efficiently patent translation requested by the EPO examiners.</li> </ul>
<p>Name and address of employer</p> <p>Type of business or sector</p>	<p>Byte-Code s.r.l. for European Patent Office - 38, Via Mauro Macchi, 20124, Milan, Italy</p> <p>Web application designer and developer, agile developer</p>

<p>Dates</p> <p>Work experience</p> <p>Main activities and responsibilities</p>	<p>April 2011 - June 2012</p> <p>Software Engineer @ Vodafone Italia</p> <p>- In Vodafone Italia, as part of my Master degree thesis project, I took part of the RoCRM team. I was responsible for the design, development, performance improvement and maintenance of a portion of ETL processes feeding a strategic reporting platform used by call center team leaders.</p> <p>- The ETL workflows were based on: 1) Oracle PL/SQL stored procedures (for RoCRM) and 2) Java stored procedures (for side projects) triggered against Oracle Databases using JDK 1.6 and Oracle 11g Enterprise Edition Release 11.2.0.2.0 – 64bit.</p> <p>- The ETL workflow for RoCRM was sometimes inaccurate and pretty resource consuming, being already a legacy monolith containing 10.000+ lines of code written in PL/SQL and not easy to test/maintain at all. My master degree thesis analyzed in detail the RoCRM issues and limitations, proposing new solutions.</p>
<p>Name and address of employer</p> <p>Type of business or sector</p>	<p>Reply S.p.a for Vodafone Italy - 11, Via Castellanza, 20151, Milan, Italy</p> <p>System integration, Business Intelligence, data warehousing</p>

## EDUCATION AND TRAINING

---

<p>Dates</p> <p>Title of qualification awarded</p> <p>Name and type of organization providing education and training</p>	<p>November 2014</p> <p>M101P: MongoDB for Developers</p> <p>MongoDB, Inc.</p>
<p>Dates</p> <p>Title of qualification awarded</p> <p>Grade</p> <p>Thesis title</p> <p>Principal subjects/occupational skills covered</p>	<p>October 2011</p> <p>Master degree in Computer Engineering</p> <p>110/110</p> <p>Hardening and performance tuning of ETL processes feeding a Telco reporting platform</p> <p>Advanced maths optimization: methods and models for business management, information systems, business process management, process and software quality management, management and strategic support systems, information technology for business management, computational intelligence, information and knowledge management, computer network services and applications, enterprise information systems, e-commerce technology</p>
<p>Name and type of organization providing education and training</p>	<p>Università di Pisa</p>
<p>Dates</p> <p>Title of qualification awarded</p> <p>Grade</p> <p>Thesis title</p> <p>Principal subjects/occupational skills covered</p>	<p>April 2008</p> <p>Bachelor degree in Computer Engineering</p> <p>105/110</p> <p>Design and development of a middleware for sensors management into Ambient Intelligence applications</p> <p>Operative systems, computer networks, computer architecture, assembler, C, Java and web programming, fundamentals of databases, fundamentals of telecommunications, fundamentals of automation, software engineering, electrotechnics, analog and digital electronics, enterprise economics</p>
<p>Name and type of organization providing education and training</p>	<p>Università degli Studi di Catania</p>
<p>Dates</p> <p>Title of qualification awarded</p> <p>Name and type of organization providing education and training</p>	<p>July 2003</p> <p>High school diploma, computer specialization</p> <p>Istituto Tecnico Industriale "Guglielmo Marconi", Catania, Italy</p>

## PERSONAL SKILLS AND COMPETENCES

---

Mother tongue(s) Italian

English

B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
----	------------------	----	------------------	----	------------------	----	------------------	----	------------------

## Social skills and competences

Thanks to the experiences achieved during my professional career, and in particular to the implementation of a conspicuous number of IT projects carried out with colleagues, I acquired very good skills in relating to a working team. In addition, I also got used to cooperate in multicultural contexts, thanks to the international working environment at both KPN and European Patent Office.

## Technical skills

I have a strong background in agile backend software design, development and deployment using various programming languages, web frameworks and application servers. I'm also experienced in system administration, especially in GNU/Linux systems, which I am a proud supporter.

Keeping myself always open to dig into new technology stacks, my current stack of development includes:

- Python & Django REST Framework
- DBs: Oracle, PostgreSQL, MySQL
- CI/CD tools: GitLab, Jenkins, BitBucket and Azure DevOps pipelines
- Containerization and version control tools: Docker, GIT
- Monitoring: Elasticsearch/InfluxDB and Grafana
- Testing: PyTest (unit tests), Newman and Robot Framework (integration/e2e tests)

In my previous employments I also worked and got familiar with: Java 8, Hibernate, Groovy and Grails, Ansible, Maven, SVN, DB2, Apache Camel, Struts, Wildfly/JBoss, Glassfish, Tomcat, SonarQube, Cobertura;

## Driving License

B driving license