Simone Agostinelli

Curriculum Vitae

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Personal Information

Last Name Agostinelli Date of birth 11/08/1993 Nationality Italian

Education

November 2018	Ph.D. Course, Sapienza University of Rome, Rome.		
current	Ph.D. program in Engineering in Computer Science. My research area is Business		
	Process Management (BPM) with particular focus on Process Mining, Robotic Process		
	Automation (RPA) and Automated Planning for BPM		
October 2015	Master's Degree, Sapienza University of Rome, Rome, 109/110.		
January 2018	Master of Science in Engineering in Computer Science - Software and Services special-		
	ization		
October 2012	Bachelor's Degree, Sapienza University of Rome, Rome, 98/110.		
October 2015	Bachelor of Science in Engineering in Computer Science and Control Engineering		
September 2007	Diploma, I.T.I. G. Lattanzio, Rome.		
June 2012	Perito Industriale Capotecnico Informatico (Progetto "ABACUS")		

Master's Thesis

Title Applying process mining techniques in a real healthcare case study

Advisor Prof. Massimo Mecella

Description The objective of the thesis consists to apply process mining techniques, on a real case of an hospital in Rome, in order to obtain meaningful knowledge about typical paths followed by particular groups of patients. Using a variety of process mining techniques, the derived healthcare processes are analysed from different perspectives. For doing that, relevant event logs were extracted from the hospital information system and analyzed using the ProM framework. The results show that process mining can be used to provide new insights that facilitate the improvement of existing careflows.

> Link of the slides: https://www.slideshare.net/secret/ 2Q47KWSn9fp8f9



Bachelor's Thesis

TitleSistema di prenotazione posti remotoSupervisorProf. Francesco QuagliaDescriptiondesigning and implementation (in C-UNIX) of a client/server application where
a user can ask for a reservation of a place in the cinema room.

Teaching Activities

November 2018Tutor, Sapienza University of Rome, Department of Computer, Control and
May 2018May 2018Management Engineering Antonio Ruberti, Via Ariosto 25 00185 Rome.
Teaching assistant for the 2nd year course "Progettazione del Software", in the
Bachelor's Degree in Computer and System Engineering

Awards

2019 **Best Forum Paper Award**, *31st International Conference on Advanced Information System Engineering*, CAiSE'19 Forum. Award for the paper "Achieving GDPR Compliance of BPMN Process Models"

Working Experience

- March 2018 Analyst Consultant, Capgemini, Via di Torre Spaccata 140, 00173 Rome.
- October 2018 Working on the service line Big Data Computing for Sky Deutschland. The projects in questions focus on the development of Spark jobs on top of the following technologies: Hadoop, Hive, Impala, Kudu, Kafka, Elasticsearch
- January 2018 **Software Development Engineer**, *internship in ALTEN Italia*, Via Adolfo February 2018 Ravà 124, 00142 Rome.

Working for TIM's SPID project both on back-end and front-end sides

June 2011 **Programmer**, *internship in INFN (Istituto Nazionale di Fisica Nucleare) di Frascati*, Via Enrico Fermi 40, 00044 Frascati (Rome). Design of a computing center able to handle at least 1800 TByte of data, using C language for UNIX machines

National/International Projects

 April 2019 CINI, Consorzio Interuniversitario Nazionale per l'Informatica, Sistemi amminpresent istrativi Giustizia.
 The main objective of the project is to study, analyze and define a system that allows

The main objective of the project is to study, analyze and define a system that allows the management of administrative and support processes of the Ministry

Programming languages

Basic HTML, XML, CSS, JavaScript, PHP, SQL, Assembly, C++

Intermediate Python, Android, C

Advanced Java

Computer skills

Operating Systems Windows: daily use for internet surfing and Java/Python programming. Linux: used both for C programming and personal curiosity.
Office Automation Language (JML), Entity-Relationship (ER)
Unified Modeling Language (UML), Entity-Relationship (ER)
Languages
Known IDE IntelliJ Idea, Eclipse, Netbeans, Android Studio
Standards HTTP, Rest, Soap, TCP/IP, SSL, SSH
Methodologies Waterfall, Agile (Scrum), eXtreme Programming
Frameworks Spring, Hibernate, MG4J, Hadoop MapReduce, Apache Spark
Others Arduino, Maven, Git, Virtualbox, Tomcat, OracleDB, MySQL, ActiveMQ, Kafka, ProM, Bizagi Modeler, Bizagi Studio, Netkit, Wireshark, SoapUI, Elasticsearch, Kibana, Hive, Impala, Kudu

Others

Communicative
skillsVery good communication skills in a development environment where teamwork
prevailsOrganizational and
management skillsAbility to work in stressful situations respecting expiration dates, behaviour
matured during university courses and improved in the working period.
Excellent problem solving skillsProfessional skillsGood knowledge of cabling and network topologies
A2, A, B

Languages

ItalianMother tongueEnglishIntermediateFrenchBasicBasicBasic words and phrases only

Interests

- music

- videogames - sport

- stay with friends

List of publications

- [1] Generating Personalized Narrative Experiences in Interactive Storytelling through Automated Planning, Simone Agostinelli, Federica Battaglini, Tiziana Catarci, Federica Dal Falco and Andrea Marrella, CHItaly19, 2019.
- [2] A User Evaluation of Process Discovery Algorithms in a Software Engineering Company, Simone Agostinelli, Fabrizio Maria Maggi, Andrea Marrella and Fredrik Milani, IEEE International EDOC Conference - The Enterprise Computing Conference, accepted, in press.

- [3] Verifying Petri Net-Based Process Models using Automated Planning, Simone Agostinelli, Fabrizio Maria Maggi, Andrea Marrella and Massimo Mecella, Workshop on Strategic Modeling and Reasoning meets Process Mining, accepted, in press.
- [4] Research Challenges for Intelligent Robotic Process Automation, Simone Agostinelli, Andrea Marrella and Massimo Mecella, Workshop on Artificial Intelligence for Business Process Management, accepted, in press.
- [5] **Synthesis of Strategies for Robotic Process Automation**, *Simone Agostinelli*, Italian Symposium on Advanced Database Systems, 2019.
- [6] Achieving GDPR Compliance of BPMN Process Models, Simone Agostinelli, Fabrizio Maria Maggi, Andrea Marrella and Francesco Sapio, Information Systems Engineering in Responsible Information Systems. CAiSE 2019. Lecture Notes in Business Information Processing, vol 350. Springer, Cham, 2019.

Projects done during the Master's Degree

- June 2017 **Diag Missions Managment**: When a professor wants to leave for a scientific mission, he/she has to follow some predefined guidelines before he/she can start. The goal of this project is to write down from scratch the process of starting/handling/ending the mission using a tool named Bizagi Modeler, and then, run the process model just obtained using Bizagi Studio which allow a professor to go through all the steps for start the mission, like reality. Link of the project: https://www.slideshare.net/secret/ nwVsMcqFpS61dl
- April 2017 The 64Base Boot2Root challenge (Penetration testing): it is based on the Star Wars storyline where the objective of the challenge is to remotely gain root privileges on the target machine by collecting six flags: the last one will allow the attacker to log into the target system as the root user. Link of the project: https://www.slideshare.net/secret/ 6qxI1KBpxEY65z
- January 2017 **Cinema Recommender System**: Android application which allow an user to search the cinemas around him using the google maps API. The cinemas are searched within a radius that range from 0 to 10 kilometers: the user will select it before starts the search. After displayed the cinemas on the map, the user can either select one by tapping on the screen or select one based on users rating. Then, after chosen the cinema, the path from the current position of the user to the just selected cinema will be built in order to allow the user to go toward it.
- September 2016 Multimode device file: The project consists to develop a Linux kernel subsystem, that is, a special device file accessible according to a FIFO style semantic (open/close/read/write services). Link of the project: https://www.slideshare.net/secret/ EzSVuDMSObPUNs

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Course	Mark	Date
Algorithm design	29/30	04/02/2016
Distributed systems and	24/30	23/06/2016
computer and network security		
Advanced programming	29/30	27/06/2016
Data management	22/30	06/07/2016
Software engineering	28/30	25/07/2016
Advanced operating systems and	30/30	02/09/2016
virtualization		
Network infrastructures	30 cum laude	16/01/2017
Formal methods	28/30	25/01/2017
Mobile applications and cloud	28/30	12/01/2017
computing		
Artificial intelligence and	27/30	10/02/2017
machine learning		
System and enterprise security	30/30	13/06/2017
Web information retrieval	28/30	22/06/2017
Process and service modeling	30/30	26/06/2017
and analysis		
Seminars in software and services	passed	22/09/2017
for the information society		
Final Exam	passed	15/01/2018

List of exams taken during the Master's Degree

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