CURRICULUM VITAE

PERSONAL DETAILS

Name: Manuel Schneckenreither

Nationality: Austria

Birthday: November 30, 1989

Place of Birth: Feldkirch, Austria



EDUCATION

2000 – 2004	Sporthauptschule Rankweil Main school in Rankweil with special focus on sport Graduation with excellent performance.
2004 – 2009	HTL Rankweil , Department for structural engeneering Matriculation with good performance.
2010 – 2011	Point Park University in Pittsburgh Studying in the USA in the areas of "Information Technology" and "Sports, Arts & Entertainment Management". Admission to the Dean's List in the spring semester.
2011 – 2014	University of Innsbruck Bachelor's degree in Computer Science.
2014 – 2017	University of Innsbruck Master's degree in Information Systems. Admission to the Dean's List during winter term 2015.
2014 – September 2018	University of Innsbruck Master's degree in Computer Science. Member at the "8th International School on Rewriting at HTWK Leipzig" in 2015.
2017 – Sep 2021	University of Innsbruck PhD Management, Department of Information Systems, Production and Logistics Management with focus on Production and Logistics Management. Member at the ISIR PhD Summer School 2019 on "Logistics 4.0: Inventory Management in a Dig-

Manuel Schneckenreither · Calle Ministro Luis Mayans $13 \cdot 46009$ Valencia (Spain) Telephone: +34 $611093771 \cdot$ Email: ms@globalpont.com

secondary supervisor Prof. Juanjo Peiró.

ital Era". Thesis: Smart Decision Support Tools for Operations Research with a Special Focus on Reinforcement Learning. Four month stay at the University of Valencia in 2020, in order to terminate final methodological stage of Doctoral thesis with the

WORK EXPERIENCE

Summer 2008 Hilti Repair Center Glasgow

Six weeks in Glasgow, Scotland, multiple activities.

2006 - 2009Handelsagentur Schneckenreither

As web designer and network administrator.

IfS Mühletor 2010 - 2011

Civilian service.

Summer 2012 & 2013 b2electronic

Activity: Programming, mainly in C#.

Benefit: Programming in an professional environment. Team

building.

Sep 2014 – Sep 2016 Student assistant at the University of Innsbruck.

("Computational Logic" group).

Activity: Student assistant in the Computational Logic group,

working on research, mainly the Master thesis.

Benefit: Working on research projects while studying. How to acquire and transfer scientific knowledge to/from students.

Nov 2015 - Oct 2016 Student assistant at the University of Innsbruck.

("Production & Logistics Management" group).

Activity: Student assistant at the department of Production & Logistics Management, working on research projects for the lead

time syndrome.

Benefit: Working on research projects while studying. Research-

ing and managing in an collaborative environment.

Jan 2017 - Jan 2021 Dissertation position at the University of Innsbruck,

PhD Management at the Department of Information Systems,

Production & Logistics Management.

Activity: Research, teaching, paper writing and publishing, supervision of theses. Benefit: Working on Operations Research and Artificial Intelligence (i.e. machine learning), research, paper writing, editing, publishing, reviewing, presentation, teamwork,

teaching, supervision of theses.

Mid 2018 - Mar 2020 Co-Founder of Oculytics GmbH, CTO

> Developing Embedded Systems for Quality Assurance using Al. Activity: Design and programming of machine learning/artificial intelligence algorithms for automated quality assurance in the food industry.

Benefit: Application of algorithms and methods in the enterprises. Design of programs, obstacles in application and implementation of scientific results. Working with partners, management of time and resources and food industry specific regula-

tions.

2021 - Apr 2023

Self-employed, working on research projects

Activity: 1. Previous project: Smartproduction 4.0: ICT als Key Enabler zur ganzheitlichen Performancesteigerung für hochinnovative Stahlprodukte. 2. Current projects: For the government of the Canary Islands in cooperation with the University of Valencia researching health impacts due to dust episodes (in the R programming language). In cooperation with several project partners, e.g. Fraunhofer Austria, SZTAKI (Hungary), the University of Innsbruck, and two companies the application of reinforcement learning to production processes are investigated.

Benefit: Self-organization, taxation and management of a (small) company. Acquisition and management of projects, customer contact and time management. Knowledge transfer between different parties (companies, researchers, students, insti-

tutions). International contacts.

since 2023

Self-employed, working for Zurich Insurance

Activity: Workflow automatisation for the execution of mathematical models for catastrophic events. Extraction, Transformation and Loading (ETL) process as a basic requirement. The main implementation are performed in the R programming lan-

guage and SQL (MS SQL Server) .

Benefit: Insights to the insurance industry. Automation. Optimisation. R programming (functional and object-oriented, R6).

TEACHING EXPERIENCE

Winter semester 2015 Introduction to Theoretical Computer Science.

Programming Methodology (Java-Programming). Spring semester 2016

2017 - 2020Management of Production Processes.

Since 2017 Supervision of more than 5 Bachelor theses and co-supervision

of 3 Master theses.

RESEARCH PROJECTS

2015-2017 An experimental analysis of the lead time syndrome

(LTS).

Project head: Mag. Mag. Stefan Häussler, PhD

Funding entity: Grant for Young Researchers from the University of Innsbruck.

19.000 EUR Budget:

Project team: Stefan Haeussler, Manuel Schneckenreither, Matthias Stefan,

Anita Onay, Quirin Ilmer

2015–2018 Complexity Analysis-based Guaranteed Execution.

Project head: Univ.-Prof. Dr. Georg Moser

Funding entity: Funded by DARPA with the program Space/Time Analysis for

Cybersecurity (STAC). DARPA (Defense Advanced Research

Projects Agency), Draper Proposal Number: 15-B13.

Budget: 332.549 EUR

Project team: Georg Moser, Stephane Gimenez, Martin Avanzini, Maria A.

Schett, David Obwaller, Alexander Maringele, Sebastian Wald-

hart, Manuel Schneckenreither

2017–2018 Production Planning meets Artificial Intelligence for In-

dustry 4.0 (Al4Industry).

Project head: Manuel Schneckenreither

Funding entity: Funded by the Aktion D. Swarovski KG.

Budget: 4.800 EUR

Project team: Manuel Schneckenreither

2018–2019 Smartproduction 4.0: ICT als Key Enabler zur ganzheit-

lichen Performancesteigerung für hochinnovative Stahl-

produkte.

Project head: Univ.-Prof. Dr. Hubert Missbauer

Funding entity: Funded by Austrian Research Promotion Agency FF.

Budget: 620.000 EUR

Project team: Hubert Missbauer, Stefan Häussler, Alexander Lohr, Quirin

Illmer, Manuel Schneckenreither, and various students

2021 Smartproduction 4.0: ICT als Key Enabler zur

ganzheitlichen Performancesteigerung für hochinnovative

Stahlprodukte.

Project head: Univ.-Prof. Dr. Hubert Missbauer

Funding entity: Funded by Austrian Research Promotion Agency (FFG).

Budget: 620.000 EUR

Project team: Voestalpine, University of Innsbruck (contractee), Solentia Soft-

ware & Consulting

2021–2023 Canarias Atmósfera y Salud 3 (CAS 3): Impacto a corto

plazo de la exposición al material particulado de origen natural (CALIMA), en los ingresos hospitalarios urgentes de las ciudades de las Palmas de Gran Canaria y Santa

Cruz de Tenerife.

Project head: Elena López Villarrubia (Servicio Canario de la Salud)

Funding entity: Fundación Canaria de Investigación Sanitaria (FUNCANIS), PI-

FUN17/17.PI.

Budget 29.970 EUR

Project team Elena López Villarrubia, Silvia Rodríguez Mireles, Ferran

Ballester Díez, Carmen Iñiguez Hernández, Manuel Schnecken-

reither

since 2022 REINFORCE: Exploiting the potential of reinforcement

learning for continuous optimisation of complex and dy-

namic systems.

Project head: Fraunhofer Austria

Funding entity: Austrian Research Promotion Agency (FFG)

Budget 162.491 EUR (University of Innsbruck, contractee)

Project team Fraunhofer Austria, SZTAKI (Hungary), Universität Innsbruck,

VRVis, Engel Austria, Robert Bosch AG

- + Basic knowledge
- ++ Advanced knowledge
- +++ Very good knowledge

Area	Subarea	Level of kn.	In years
Operating Systems	GNU/Linux	+++	10+
	Windows (98,XP,Vista,7,8,10)	++	10+
Programming Lang.	С	++	7
	R, Python	+++	4
	Java, C#	+++	8
	Haskell, OCaml	+++	7
Products/Tools	Databases (SQL), MySQL, Postgres	+++	5
	Emacs	+++	8
	<u> </u>	+++	8
	MS Office, LibreOffice	+++	6
Computer Science	Imperative Programming, Scripting	+++	10+
	Functional Programming	+++	10+
	Object-oriented Programming	+++	10+
	Machine Learning	+++	8
	Concurrent Programming	++	3
	Statistics	++	4
Operations Management	MRP, Supply Chain, HPP	+++	5
	Optimization	+++	5
	Linear Programming	++	4
	Simulations	+++	7
	Data-Warehouse-Systems	++	2
	IT-Project Management	+	2
	Knowledge-Management	+	1
Soft Skills	Critical Thinking	+++	
	Leadership	++	
	Teamwork	+++	
	Problem Solving and Creativity	+++	
Languages	German	Native language Business fluent Fluent	
	English		
	Spanish		

Valencia, September 15, 2023