# CHRISTOPH SCHEUCH

I am an independent data science and business intelligence expert with a passion for all topics surrounding finance and data.

I previously served as the Head of Artificial Intelligence. Director of Product, and the Head of Business Intelligence & Data Science at wikifolio. Before I joined wikifolio, I received my PhD from the Vienna Graduate School of Finance with a research focus on the economics of new financial technologies and big data analysis.



# **M** WORK EXPERIENCE

**Expert** 2024

2023

2021

2021

2021

2020

Tidy Intelligence

· Since January 2024, I create blog posts about tidy data science on my website tidy-intelligence.com

Head of Artificial Intelligence 2024

wikifolio Financial Technologies AG

• Vienna, AT

· I researched cutting edge AI technologies and prototype AI-driven products using R and Python

**Director of Product** 2023

wikifolio Financial Technologies AG

Vienna, AT

· I managed product strategies, oversaw the product lifecycle, and coached other product leaders and data scientists

**External Lecturer** 2023

WU (Vienna University of Economics and Business)

O Vienna, AT

· I tought finance master students how to manage empirical projects

Co-Creator & Maintainer 2021

Tidy Finance

· Since 2021, I am a co-creator of the open-source books 'Tidy Finance with R' and 'Tidy Finance with Python' hosted on tidy-finance.org

Head of Business Intelligence ℰ Data Science

wikifolio Financial Technologies AG

Vienna, AT

· I supervised and developed a broad range of tools to analyze user behavior and product performance.



# CONTACT

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Christophscheuch

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## **SKILLS**

R	
Python	
SQL	
Markdown	
Figma	
Matlab	
HTML	
Julia	

Prae-Doc Reseacher 2020 • Vienna, AT WU (Vienna University of Economics and Business) 2015 · FWF-financed project assistant at the Vienna Graduate School of Finance with main duties ranging from contributing to scientific projects, active participation at international conferences to teaching business students. Intern 2015 • Vienna, AT Fiancial Market Authority (FMA) · Part of the supervision of non-bank financial institutions in April and May 2015. My tasks included evaluating data for insurance sector stress testing and compiling reports pertainting to financial stability. 2015 Research Assistant Vienna, AT Institute for Advanced Studies (IHS) · I updated a project on social security fraud in the Austrian construction sector in February and March 2015. 2015 Intern • Vienna, AT Ithuba Capital AG 2014 • Part of the portfolio advisory team from November 2014 to January 2015. I compiled reports for debt restructuring negotiations and translated code for pricing of collateralized debt obligations. **Research Assistant** 2013 ♥ Vienna, AT Institute for Advanced Studies (IHS) 2012 · Part of the labour market and social security group from May 2012 to October 2013. I maintained the in-house tax-benefit model and contributed to several projects on the Autrian tax and pension system. **EDUCATION** PhD, Finance 2020 Vienna, AT Vienna Graduate School of Finance 2015 Mag. rer. soc. oec., Economics 2015 Vienna, AT University of Vienna 2012 Bakk. rer. soc. oec., Economics 2012 Vienna, AT University of Vienna

2009

# RESEARCH EXPERIENCE

# Tidy Finance with Python

with Christoph Frey, Stefan Voigt and Patrick Weiss

• We wrote a translation of our first textbook to Python, which will be published via Chapman & Hall/CRC in 2024.

## Tidy Finance with R

with Stefan Voigt and Patrick Weiss

• We wrote a textbook on solving empirical problems in financial economics using reproducible and tidy coding principles, which was published via Chapman & Hall/CRC in 2023.

#### Crowdfunding and Demand Uncertainty

Solo-authored

- I use mechanism design theory to characterize the profit-maximizing crowdfunding mechanism when consumers have private information about possible reservation prices.
- I presented the paper at the Second Toronto FinTech Conference and the 2018 and 2019 VGSF Conference.

## Building Trust Takes Time: Limits to Arbitrage in Blockchain-Based Markets

with Nikolaus Hautsch and Stefan Voigt

- We demonstrate how blockchain-based settlement introduces a novel friction to cross-market trading, which was published in the Review of Finance in 2024.
- I developed the R package 'CryptoX' to collect orderbook data from the public APIs of crypto exchange and complemented it by a comprehensive database of Bitcoin transactions.
- I presented the paper at the 2018 Crypto Valley Blockchain Conference, the 2018 Finance Research Day in Graz, the 2019 Financial Intermediation Research Society Conference and the 2019 European Finance Association Meeting.

#### Perceived Precautionary Savings Motives: Evidence from FinTech

with Francesco D'Acunto, Thomas Rauter and Michael Weber

- We show that households with higher liquid wealth behave as if they faced strong precautionary savings motives even if no observables suggest they should do so.
- I used R to aggregatre more than 50 million individual transaction to a sample of monthly user financial characteristics which I analyzed in Stata.

# Fishing with Pearls: Fishing with Pearls: The Value of Lending Relationships with Prestigious Firms

with Alexander Mürmann and Thomas Rauter

- We show that lenders compete for prestigious borrowers and offer lower upfront fees to initiate lending relationships with them.
- · I used SQL and R to construct a comprehensive set of syndicated loan deals in the US which I analyzed in Stata.
- I presented the paper at the 2018 Financial Intermediation Research Society Conference.

#### The Dark Side of Liquid Bonds in Fire Sales

with Alexander Mürmann and Maria Chaderina

- We argue that institutional investors fail to internalize the negative impact they exert on other market participants in fire sales.
- I used SQL and R to analyze more than 10 years of individual corporate bond transactions and thousands of raw insurance company filings.
- · I presented the paper at the 2016 and 2017 VGSF Conference.

#### Why Do Mutual Funds Hold Cash?

with Maria Chaderina

• We theoretically argue that mutual fund managers sell illiquid assets in response to redemptions to preserve the optimal fund size.

# **TEACHING EXPERIENCE**

2023 | 2021

2016

#### Instructor

WU (Vienna University of Economics and Business)

• Vienna, AT

· I taught an industry lab for quantitative finance master students together with Prof. Stefan Pichler

2019 • Instructor

Perm Winter School

Perm, RU

· I was an instructor for 'Liquidity Monitoring' on cryptocurrency markets.

2019 **T** 

#### Thesis Supervisor

WU (Vienna University of Economics and Business)

• Vienna, AT

· I supervised 12 Bachelor students who wrote theses on cryptocurrency markets and interest rate modeling.

2017 • **Tutor** 

Gutman Center for Portfolio Management

Vienna, AT

· I supervised students who worked on FinTech as part of the Gutman Private Wealth Management Seminar.

2017	•	Teaching Assistant
		WU (Vienna University of Economics and Business)
		· I taught 'Linear Algebra' to business students.
2014	•	Teaching Assistant
 2012		Technical University of Vienna
		• I taught 'Microeconomics' to mathematics students in the summer terms of 2012 and 2014.
2013   2011	•	Teaching Assistant
		University of Vienna ♥ Vienna, AT
		· I was a teaching assistant for the courses 'Calculus', 'Keynes for Beginners', 'International Macroeconomics', 'Growth, Distribution and Wage Policy' and 'Macroeconomics and Inequality'
	<b>P</b>	AWARDS
2020	•	Department Research Award
		WU (Vienna University of Economics and Business)
		Award for excellent research achievements of young researchers.
2019	•	Best Doctoral Student Paper
		Second Toronto FinTech Conference Toronto, CA
		· Award for the paper 'Financing under Demand Uncertainty'.
2017	•	Student Travel Grant
		American Finance Association
		· Travel grant to help defray the costs of attending the annual meeting.
2017	•	Lykke Streams Winner
		Lykke Exchange   ♥ Zurich, CH
		· Winner of competition to set up a simple trading environment in R.
2015	•	Franz Weninger Award
		Austrian National Bank (OeNB) ♥ Vienna, AT
		· Award for outstanding master thesis in the field of monetary policy.
2013	•	Performance Scholarship
 2010		Austrian Federal Ministry for Science and Research Vienna, AT
2010		· Scholarships for outstanding academic achievements.
2010	•	Windhag Scholarship
		Office of the Federal Government of Lower Austria
	1	· Scholarship for outstanding academic achievements.

# **•** FURTHER ACTIVITIES

# 2023 • Designing and Building AI Products and Services

MIT xPRO 

◆ Online

• Course on the AI design process, fundamentals of machine learning and deep learning, designing human-computer interfaces, designing organizations that combine human and artificial intelligence, marketplace frontiers of AI design

#### 2023 • Co-Organizer

Berlin R Users Group

Perlin, DE

· Since 2023, I co-organize meetups of the Berlin R Users Group (BRUG)

#### 2019 • Visiting PhD Student

University of Chicago Booth School of Business

Chicago, US

 $\cdot$  Two-month stay to work with Thomas Rauter and Michael Weber.

#### 2019 • **Reviewer**

Journal of Financial Economics

· Ad-hoc reviewer for a top 3 finance journal.

#### 2017 • Blockchain & Smart Contracts Workhshop

Senacor Technologies

**♀** Vienna, AT

· Two-day workshop taught by Daniel Karzel.

#### 2016 • Data Science & Machine Learning Summer School

Barcelona Graduate School of Economics

Parcelona, ES

· One-week course taught by Alexandros Karatzoglo.

#### 2016 • Market Microstructure Workshop

Norwegian School of Economics

Pagen, NO

• Two-day course taught by David Easley and Maureen O'Hara.

#### 2015 • Student Representative

University of Vienna

🗣 Vienna, AT

 $\boldsymbol{\cdot}$  Student representative for the Austrian National Union of Students.

# 2015 **• Activist**

2011

Roter Börsenkrach

♥ Vienna, AT

· Editor, layouter and co-author of a paper for economics students.

#### 2013 • Student Representative

Institute for Advanced Studies (IHS)

♥ Vienna, AT

• Representative of research assistants at the Institute's conference.

Class of Excellence
University of Vienna

**♥** Vienna, AT

 $\cdot$  One-year program to promote the best and most promising students.