SONJA
KATZ

Biomedical Data Scientist

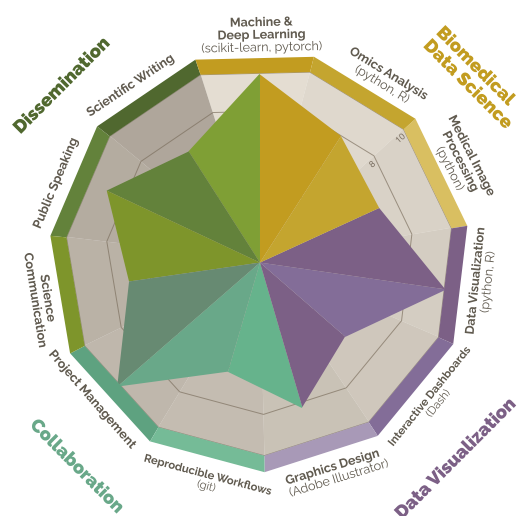📞 +41 77 405 98 57   ✉ sonja.katz@hotmail.com   in LinkedIn   🌐 Website

Computational biologist with expertise in **machine learning and AI-driven precision medicine**, specializing in transforming complex **biomedical data** into meaningful clinical insights. Proven track record of developing **innovative research tools** that bridge computational methods and medical research, with a focus on **creating practical solutions for healthcare challenges.**

AREAS OF EXPERTISE

- Machine Learning & AI in Precision Medicine

- Multi-Omics Data Analysis

- Visual Data Storytelling

- Interdisciplinary Collaboration

- Scientific Communication

KEY ACHIEVEMENTS

- Leading role in AI and data science efforts in **international infectious disease consortium** (PerAID), developing web-deployed CDSS tracking **7 critical health outcomes** across hospital journey.

- Currently assembling **Europe's largest** longitudinal **PET/CT sarcoidosis cohort:** ~360 patients, ~1,300 scans with integrated **clinical, molecular, and imaging datasets.**

- Drove research translation by coordinating cross-functional initiatives with **9 academic and clinical stakeholder groups** in the frame of a Horizon 2020 initiative.

PROFESSIONAL EXPERIENCES

● Postdoctoral Researcher   University Hospital Zurich, Department of Immunology

2025 - now

Sarcoidosis Multi-Modal Research Initiative
- Leading creation of the largest multi-modal, longitudinal sarcoidosis cohort in Europe
- Developed an automated end-to-end organ segmentation pipeline for PET-CT scans
- Created advanced AI models for predictive disease progression and patient stratification
Adviser: Prof. Dr. Jakob Nilsson

PhD candidate (cum laude)
in Computational Biology

LifeGlimmer GmbH, Berlin, GER

2020 – 2024

Thesis title: "From bytes to bedside and back: Enhancing clinical decision support with explainable AI"

- Competitively selected for Marie Skłodowska-Curie Innovative Training Networks (HORIZON 2020)
- Realized 12 translational precision medicine projects across 9 international institutions within four years

Adviser: **Prof. Dr V.A.P. Martin dos Santos; Wageningen University and Research, NL**

EDUCATION

Master of Science
in Biotechnology

University Of Natural Resources And Life Sciences, Vienna, AT

2016 – 2019

- Performed wet lab studies using human colon carcinoma cell culture

Bachelor of Science
in Biotechnology

University Of Natural Resources And Life Sciences, Vienna, AT

2013 – 2016

- Production, purification, and characterization of recombinant mutants

ADDITIONAL SKILLS & PERSONAL ACHIEVEMENTS

Languages
German, English, Italian (B1)

Professional Volleyball Player
- Long-term captain of Austria's most decorated volleyball club
- Former Austrian Women's National Team athlete

Long-Distance Hiking
- Completed the 3,000km "Te Araroa Trail" across New Zealand

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