# Aaliyah Hänni

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Date of Birth: 28.6.1998 | Marital Status: Married | Nationality: United States | Residence: Swiss B-permit



### Education

**Master of Science in Data Science** 

Sep 2020 - Jun 2022

University of Washington, Seattle, WA

Sep 2017 - Dec 2019

**Bachelor of Science in Mathematics** Oregon State University, Corvallis, OR

# Professional Experience

Data Scientist Sep 2021 - Sep 2022

University of Washington Academic Experience Design & Delivery, Seattle, WA

- Developed a machine learning algorithm in Python to predict risk level of students being put on academic probation to provide faculty and staff the opportunity to proactively reach out to students
- Collaborated in designing course and program recommendations for students
- Generated a natural language processing model to detect offensive language and hate speech in over 3.5 million course evaluations

# IT Business Analyst Apr 2019 - Jun 2022

JH Kelly, Seattle, WA

- Regularly met with Sr. Executives and other stakeholders, to gather business requirements for new development and analytical projects, providing weekly status updates for ongoing projects
- Created over 100 company dashboards using Tableau & PowerBI data modeling software to present big data sets to provide actionable insights for leadership
- Led multiple training sessions for 300+ participants, including physical and virtual attendees to review new softwares and technologies

# Research Experience

Data Lead Dec 2021 - Present

OneCourt, University of Washington, Seattle, WA

- Developing long short-term memory, U-Net, and multi-frame convolutional neural network models to optimized inference and accuracy for tracking sports data in in-person sporting events
- Coordinate with engineering and networking teams to deliver and test models with various physical prototype devices

## **Computer Vision Researcher**

Jun 2022 - Present

SparkTube, Zürich, Switzerland

• Collaborating to train various models using the YouTube 8M dataset, to segment and summarize video clips into chapters

## **Machine Learning Developer**

Sep 2021 - Jun 2022

AI Fashion: Textile Pattern Generation & Application, University of Washington, Seattle WA

- Developed and compared performance of 5 generative adversarial network architecture models trained to generate textile patterns and shapes
- Created a Django application hosted on AWS for users to test out various AI generated clothing patterns on selected items, or their own uploaded images

Research Assistant Sep 2018 - Dec 2019

Department of Mathematics, Oregon State University, Corvallis, OR

- Identified a new way to generate Euler's phi function using sturmian words, using an algorithm that had a lower computational complexity than previous methods
- Published findings in the Encyclopedia of Natural Numbers (Sum of Totient function)

# Teaching Experience

# **Undergraduate Teaching Assistant**

Sep 2019 - Dec 2019

Department of Mathematics, Oregon State University, Corvallis, OR

- Graded and provided feedback for approximately 500 assignments and tests
- Tutored undergraduate students in weekly office hours on mathematics concepts

### **Faculty Student Peer Mentor**

Sep 2018 - Aug 2019

College of Science, Oregon State University, Corvallis, OR

- Organized task lists and designated goals for biweekly meetings between peers and faculty members
- Facilitated tutoring sessions for 5 peers weekly on mathematics, general science, and computer science undergraduate coursework

## **Mathematics and Science Tutor**

Sep 2015 - Aug 2017

Portland Community College, Portland, OR

• Tutored 100+ undergraduate students weekly in elementary and advanced mathematics, general chemistry and general biology

#### Calculus I Lab Assistant

Mar 2016 - Jun 2016

Portland Community College, Portland, OR

- Led lab sessions to 30+ students, providing summary lectures on general concepts and delivering small group assignments
- Tutored 100+ students individually and in small groups on calculus based concepts

# Volunteer Experience

### Web Developer

Oct 2022 - Present

Cowlitz Youth Soccer Association, Kelso, WA

• Develop and maintain a Node.js website hosted on AWS for the purpose of advertising, informing and registering for youth soccer camp

### **Vice President of Relations**

Jun 2021 - Oct 2022

Science & Engineering Business Association, Seattle, WA

- Represent SEBA as a liaison between groups and departments within the University of Washington and external organizations and company partners
- Lead organizer for the Science and Technology Showcase (STS), providing students with an opportunity to present and pitch their technology and research projects

# Language Proficiencies

English: NativeGerman: Level B1Spanish: Level A2

## **Technical Proficiencies**

# Computer Languages

- Proficient in Python, R, C, C++, HTML, CSS, Javascript, SQL
- Experience with Matlab, Mathematica, LaTeX, Git
- Familiarity with MASM Assembly, Qiskit

#### **Databases**

• Experience designing and accessing MySQL, PostGres, Azure SQL, Access databases

#### Software

- Proficient using MS Office Suite, Visual Studios, SQL Studio, PyCharm, Jupyter Notebook, Google Colab, Flask Applications
- Experience using Tableau, PowerBI, Github, Apache Spark

## Machine Learning

- Proficient developing natural language processing, regression, classification, recommendation, and neural network models
- Experience with computer vision modeling, including image segmentation, object detection, classification of images, and image generation

# References

References will be made available upon request.