# **Anna Kis**

#### **Pure Math & Computer Science**

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in/annabkis

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### **Summary of Qualifications**

#### **Programming**

- Python, JavaScript, MATLAB, C, C++, C#, Racket, HTML, CSS
- Git, Firebase, Figma, PsychoPy

#### Skills

- Autodesk, SolidWorks, Photoshop, Microsoft Office, Unity
- Fluent in Hungarian and English, intermediate French

# **Relevant Experience**

#### **University Tutor | University of Waterloo**

Sept 2023 – Present

- Tutor for algebra and related subjects at the math department's tutoring center
- Assists individuals and groups of students with their understanding

#### Pure Mathematics USRA | University of British Columbia May 2022 – August 2022

- Conducted research on Calabi-Yau manifolds in relation to the SYZ conjecture
- Attended talks on related subjects, presented own findings, and wrote a summary

#### **Cybersecurity Co-Op Student | RCMP**

January 2022 – April 2022

- Developed applications for analyzing and documenting indicators of compromise using Flask and MISP
- Built DNS-bind server for logging malicious IPs

#### **Software Engineering Co-Op | DropoffAI**

June 2021 – Oct 2021

- Used various Python libraries, including PyTest, to develop unit and software tests
- Built demo applications with Streamlit to showcase product
- Researched and developed machine learning solutions for various classification and clustering problems, including using graph-CNNs

#### **QUASAR Research Assistant | University of Ottawa**

January 2021 – April 2021

- Conducted research on the hidden subgroup problem in extraspecial p-groups
- Applied techniques from group theory and related literature to wreath product groups
- Attended weekly QUASAR, student, supervisor meetings to discuss and present work
- Wrote a summary of findings and held a final presentation on the topic

#### **Experiment Developer | University of Waterloo**

November 2020 – January 2021

- Assisted with creation of various neuroscience experiments for analysis of multisensory integration in older adults
- Coded and tested experiments in PsychoJS and PsychoPy, using Pavlovia to run
- Worked together with other researchers to help transition to online platform

#### **R&D** Engineer Student | FinVentures

May 2020 – August 2020

- Conducted fundamental research on standards and protocols, including ISO 20022
- Produced clear and well-designed documentation for technical solutions
- Prototyped solutions to demonstrate proof of concept with rapid prototyping
- Effectively delivered presentations on the product and related concepts
- Organized and led a group of co-op students, managing numerous projects in parallel

- Assisted with development of pllanet.ca, a website aiming to facilitate language learning by connecting native speakers and learners in chat rooms
- Used HTML, CSS, and JavaScript to alter front-end of website
- Worked with Firebase to safely store and access user data

#### Nanochemicals Research Assistant | University of Waterloo May 2019 – August 2019

- Worked on functionalizing cellulose nanocrystals using silver nanoparticles to enhance antimicrobial properties of latex to develop novel, biodegradable surgical gloves
- Trained in a variety of machinery, including UV-vis, DLS machine, tensile machine
- Conducted lab procedures, including antimicrobial tests and latex preparation
- Analyzed and synthesized data and past research to optimize procedures, wrote SOPs
- Use of Microsoft Excel to perform data analysis

#### **Education**

## Honours Computer Science and Pure Math | University of Waterloo

- Bachelor of Mathematics Candidate, CGPA: 85.36%
- Exchange terms at Lund University and École Polytechnique Fédérale de Lausanne
- Projects: VR game in Unity with Oculus headset
- President's International Experience Award (2023)
- Don Mills Cross Country Award (2023)
- University of Waterloo Athletic Financial Award (2022)
- Fairfax Financial Athletic Leadership Scholarship (2021)
- Terry Goodenough Memorial Cross-Country Excellence Award (2020)
- University of Waterloo President's Scholarship of Distinction (2019)

#### **Activities and Interests**

- Co-Op Connection Regional Online Ambassador, Winter 2021
- MathSoc event coordinator, 2020
- Creative Writing Club president, 2019
- Varsity cross country, 2019-2021, 2023
- CS/Eng rep: Technology in Pharmacy, 2020
- Treasurer: UW Right to Play, Winter 2020
- VP of Finance: Pure Math Club, Spring 2019