Sari Pagurek van Mossel

Email: sari.pvm@gmail.com   Phone: +1-613-413-3304   Github: https://github.com/saripagurek
Website: saripagurek.com/   LinkedIn: www.linkedin.com/in/sari-pagurek-van-mossel-49772429b

EDUCATION

Bachelors of Computing Honours - Queen's University, Kingston, Ontario (Expected Graduation: April 2025)
- Achieved Faculty of Arts and Science Dean's Honours List

SKILLS

Languages & Frameworks: HTML, CSS, Python, JavaScript, Java, Bash Shell Scripting, C, C#, React.js, Processing, SpringMVC
Software & Tools: Figma, Adobe Creative Suite, Xcode, Github, LaTex, Unity, Cinema4D

EXPERIENCE

Teacher's Assistant, *Queen's University School of Computing*   *September 2024 - December 2024*
- Assisting students during office hours and marking programming related topics for third year computing courses

Software Development Engineer Intern, *Amazon*   *June 2024 - September 2024*
- Designed and implemented new full stack features to existing labour scheduling software within the Amazon Fulfillment Technologies organization, utilizing React.js and Java with Spring MVC
- Utilized AWS tools including Kinesis and DynamoDB to build back-end APIs, designed to fit into the existing software workflow
- Conducted testing and applied software engineering principles to ensure code quality including code reviews, agile development, and technical documentation

Vice Chair of HackHer, *Queen's University Women In Computing*   *May 2024 - Continuing*
- Coordinating the organization of the 2025 HackHer Hackathon, leading a team of 5 to carry out outreach and logistical planning

Software Developer, *Queen's University Visual Cognition Lab (with Dr. Castelhano)*   *May 2023 - December 2023*
- Developed research and data analysis software for cognition studies alongside psychology graduate students and professors
- Created and maintained Virtual Reality simulations using Unity and C# to collect and calculate fixation and saccadic movement data (precise eye movement metrics) for perception research
- Applied linear algebra concepts to transform 3D coordinate spaces and measure angles
- Designed and developed analysis software in Python using techniques including Hidden Markov Modelling, Switch-Point Analysis, and data processing with other Machine Learning libraries and open-source computer vision software
- Implemented analysis and calculation techniques from state-of-the-art research papers by collaborating professors

Web Designer, *Queen's University Computing Students Association*   *April 2023 - April 2024*
- Designed and prototyped 3 user friendly websites using Figma to direct user traffic, maintain design style, and strengthen brand identity

Development Team Lead and User Experience Designer, *Canadian Youth for Youth Empowerment*   *January 2023 - April 2023*
- Managed and collaborated with a team of 5 developers to create a mental health based online platform using React.js

UX Design Intern, *Goodself Co.*   *May 2022 - August 2023*
- Held a lead responsibility in creating and updating app UI design features, prototypes, and user flows in Figma
- Spearheaded the designing of 3 major app features, communicating effectively with both product and development teams
- Efficiently conducted quality assurance testing using Github pull requests, bash shell scripting, and Xcode simulator

Web Developer, *Queen's University Women In Computing*   *April 2022 - April 2024*
- Created mobile friendly pages and implemented new features to the organization's website using HTML, CSS, and JavaScript

PROJECTS

3D to 2D: Using Image Segmentation to Automate Rotoscoping
- Using a U-Net Convolutional Neural Network structure to process live footage frame-by-frame to simplify the subject into 3 discrete shades as well as separate it from the background in an effort to create a base rotoscoped animated sequence

Heatmap Display for Eye Tracking Data: View on Github
- Implemented OpenCV and other Python libraries to calculate frame by frame coordinates and generate a heatmap visualization from given eye movement fixation and saccade data

Predicate Logic Calculator: View on Github
- Developed a recursive Python algorithm to parse and evaluate a given predicate logic expression and return a completed truth table, interfacing the program with React.js using brython (a JavaScript based Python interpreter)

ACCOMPLISHMENTS

- Best Art Project at the Creative Computing Showcase at Queen's University (2023)
- First Place Category Winner in Food Insecurity and Social Good at HackHer (Queen's University Hackathon) (2023)
- Queen's University Principal's Scholarship for Academic Excellence given to averages of 95+ (2021)
- OCDSB Silver Medal given to averages of 90+ (2019 - 2021)
- Ontario Scholar Award (2021)