Japnit Kaur Ahuja

(647) 978-1635 | japnit.ahuja@ontariotechu.net | LinkedIn | Github | Website

HIGHLIGHTS OF QUALIFICATION

- Self-motivated third year computer science undergraduate student with a strong foundation in programming and 4+ years of machine learning research experience
- Creative problem-solving skills applied in a publishing a paper in machine learning and interning at TELUS
- Demonstrated excellent teaching and entrepreneurial skills by establishing a non-profit, The Girl Code, to teach coding for free to underprivileged youth, focussing on girls, in India
- Developed robust interpersonal skills working in multi-cultural teams while studying in Singapore and coordinating international collaborations for The Girl Code

SKILLS SUMMARY

- **Languages** Python, Javascript, Java, C++, HTML, CSS, SQL, R, MATLAB, Latex
- **Frameworks** ReactJS, NodeJS, Redux, MongoDB, Django, Flask, Scikit, Scipy, Pandas, NumPy
- **Tools/Platforms** GIT, PostgreSQL, MySQL, SQLite, Firebase (NoSQL), Power BI, Tableau
- **Soft Skills** Self-starter, Time Management, Technical and Non-technical Communication Skills, Team Player

EDUCATION

University of Ontario Institute of Technology (Graduating in 2024) Oshawa, Canada
Bachelor of Science in Computer Science with minor in math, CGPA: 4.3/4.3 2020 - 2024
- The only recipient of the Global Leadership Award worth 72,000 CAD.
- Earned President's list in Fall 2020, Winter 2021, Fall 2022 and Winter 2022.

National Junior College, Singapore Singapore
GCE A-Level Certificate in Computing, Final Grades: A+ in all subjects October 2015 - April 2020
- One of two Indian recipients of the prestigious merit-based fully funded SIA Youth scholarship to complete high school in Singapore.
- Exercised critical thinking skills in navigating new settings at an early age.
- Developed global awareness through immersion in different cultures.

WORK EXPERIENCE

Engineering and Technology Co-op Intern Toronto, Canada
TELUS May'22 - Present
- Automating and streamlining processes for the networks operations team
- Developing web dashboard in React and Node.js to track network outages
- Creating dashboards to analyze individual performance metrics in Tableau

Undergraduate Student Research Fellow Oshawa, Canada
Ontario Tech University June' 21 - May'22
- Leveraged machine learning in network science to control disease spread under Dr. Jane Breen, Ontario Tech University
- Used Python to analyze graph centrality statistics to test and quarantine nodes to eradicate infection
- Converted insights from experimentation results into novel hypotheses and experimentation

Co-authored Published Research with Dr. Daren Ler Singapore
National Junior College Mar' 19 - Nov' 20
- Devised a new landmarker that captured information at an instance level to facilitate algorithm selection in meta-learning under Dr. Daren Ler, the National University of Singapore
- Cleaned and preprocessed 190 multiclass datasets from the UCI repository to produce 7761 binary datasets using ensemble mechanisms.
- Created machine learning models in Python with libraries such as scikit-learn, scipy and TensorFlow.
- Published in Asian Conference of Machine Learning 2020 [Paper]

SSEF Student Researcher Singapore
National Junior College Feb' 18 - Mar' 19

- Constructed a novel two-layered algorithm selection framework that categorized datasets in the first layer based on complexity
- Used Python and R to conduct final experimentations on real world datasets from UCI repository
- Awarded Yale-NUS award for original and innovative research in Technology and Merit academic honor at the national level competition, Singapore Science and Engineering Fair 2019. [SSEF Report]

- **Product Management Intern** India
  Refining Skills Academy *May'20 - June' 20*
  - Designed low and high-fidelity wireframes on Figma and Adobe XD.
  - Developed a prototype for an online education platform; rsacademy.in

COMMUNITY LEADERSHIP

- **Co-founder and Director**
  Girlcode Humanitarian Foundation (The Girl Code) *2017-Present*
  - Founded a registered non-profit to close the gender gap in tech by hosting free coding workshops for underprivileged girls focusing on India
  - Taught Python, HTML and CSS to over 2000 girls worldwide
  - Developing mobile-friendly technical curriculum in native languages to teach girls from remote and rural areas.
  - Increased social media followers to 30k+ [Instagram]
  - Leading and training a team of hundred volunteers globally
  - Mentoring women in the tech community of 2k+ people on Slack
  - Remodeled the website (thegirlcode.co) from HTML and CSS to React and Javascript

PROJECTS

- **Data Analysis on World University Ranking Dataset** [Git]
  Python, Machine Learning
  - Cleaned and preprocessed the dataset using sklearn library to deal with missing values and discrete values
  - Built a linear regression model to performed correlation analysis between the factors that affect university ranking
- **Cruze: A dashboard for SMEs** [Git] [Website]
  React, Javascript, Python, HTML, CSS, Machine Learning
  - Created a dashboard in React for SMEs with app integration with google maps API to locate nearby vendors
  - Conducted sentiment analysis on amazon reviews in Python
- **Project Management Software** [Git]
  React, Redux, MongoDB, Node.js
  - Implemented various screens for a project management software front end using React.js utilizing various predefined components from NPM (Node Package Manager) and redux library
  - Developed features like project and task creation while managing state using redux saga
  - Designed an integrated database using MongoDB and built API following RESTful standards to store data
- **Preliminary Experiment on Beta Frequencies** [Git]
  Python, Machine Learning
  - Generated binary-classed base-level artificial datasets of different configurations in a 2-D Euclidean plane of varying complexity
  - Measured the information captured in the conventional meta-features vs our novel approach of beta frequencies as described in research paper
- **Plutus Website** [Git] [Website]
  React, Bootstrap, Javascript
  - Created a responsive user friendly website using React JS

PUBLICATIONS

Chen, Haofei, Ya Liu, Japnit Kaur Ahuja, and Daren Ler. "A Distance-Weighted Class-Homogeneous Neighbourhood Ratio for Algorithm Selection." In Asian Conference on Machine Learning, pp. 1-16. PMLR, 2020

HONORS AND AWARDS

- **Adobe Research Women-In-Technology Scholarship 2022 worth 10k USD**
- **Cadence Women in Technology Scholarship 2022 worth 5k USD**
- **Zonta International Women in Tech Scholarship 2021 worth 8k USD**
- **TEDx Speaker, Ngee Ann Polytechnic, Singapore** [Talk]