

Arav Sharma

(437) 662 3540 | a655shar@uwaterloo.ca | [linkedin.com/in/arav](https://www.linkedin.com/in/arav) | github.com/Aravsharma1

EDUCATION

University of Waterloo

Bachelor of Computer Science in Computer Science, Honors with Co-op

Waterloo, ON

Expected 2028

EXPERIENCE

Club Founder and President

Feb 2021 – Aug 2023

Dinance- First student-led Blockchain-AI club in the UAE

Dubai, UAE

- Held multiple face-face sessions teaching basic Blockchain concepts such as **Consensus algorithms (POW, POC, POS)**, **hashing**, **cryptocurrency mining**.
- Organized the **first AI/Blockchain-related competition in the UAE**, BASIC (Blockchain-AI Student Innovation Challenge), participating teams provided **AI-Blockchain solutions** based on the 2 themes; **Urban Challenges and Healthcare**.
- Raised **\$2000** from startups in Dubai to finance the competition.

AI Research Intern

Jul 2022 – Aug 2022

University of California, San Diego

Remote

- Assisted on a research paper titled "**Data Distillation: A Survey**" by reading and providing summaries of **3 top-conference Machine-Learning Papers**.
- Gained exposure to **synthesizing high-fidelity data** summaries of large data-sets and insights into **continual and meta-learning**.
- The paper is likely to be submitted to the **Journal of Machine Learning Research(JMLR)**.

Software Engineer Intern

Jul 2021 – Aug 2021

360tf

Dubai, UAE

- Submitted reports on **automating customer-verification process** using **Computer Vision**, **Kanade-Lucas-Tomasi** algorithms to **CTO**
- Performed **Google lighthouse metric tests** on website; **selected by co-founder to re-vamp company's website**, introducing me to **web-development**.

PROJECTS

Benign Vs Malignant | *Python, Jupyter Notebooks, Machine Learning*

Aug 2022 – Jan 2023

- Developed **linear regression**, **logistic regression**, **Naive Bayes Algorithm model**, **Simple Boundary classifier models** to predict whether a breast cancer cell is **malignant or benign** by training on the **Breast Cancer Wisconsin (Diagnostic) Data Set**
- Naive Bayes Algorithm had the highest accuracy of **94.2%**.

Predicting Airline Satisfaction | *Python, Jupyter Notebooks, Machine Learning*

July 2022 – Aug 2022

- Developed a **Decision Tree Classifier and K-Nearest Neighbour (KNN)** model that **predicts a customer's airline satisfaction** based on factors like in-flight service, departure, arrival time, ease of online booking and gate location.
- Decision Tree Classifier had a higher accuracy than the KNN model (**92.7% vs 92.2%**).

Custom Voice-Model Prototype | *Google Colaboratory, CNN, Python*

Sep 2021 – Nov 2021

- Co-developed a CNN voice model **predicting a speaker's intent** by inputting a phrase, tokenizing it, encoding it into integers, processing the encoded phrase using BERT by Google, evaluating output of BERT model through neural networks, outputting intent.
- Achieved **98% accuracy**, running on **5 epochs**, due to **transfer learning**.
- Presented the project to Stanford, MIT PhD students.

RECOGNITION

President's Scholarship of Distinction: Merit-based scholarship awarded by the University of Waterloo (Faculty of Mathematics) amounting to **2,000 dollars**

International Scholar Award: Merit-based scholarship awarded by the University of Toronto (Faculty of Arts and Science) amounting to **100,000 dollars**