

# Elena Pan

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## SKILLS

### LANGUAGES:

JavaScript  
Python  
C/C++  
Kotlin  
Java  
HTML  
CSS

### TECHNOLOGIES:

Node.js  
React  
React Native  
MongoDB  
Express.js  
Flask  
Wordpress  
Unity  
GCP  
Firebase

## EDUCATION

### UNIVERSITY OF WATERLOO

Bachelor of Software Engineering  
2020 - 2025

## AWARDS

2020 YOUTH HACKATHON BEST TECHNOLOGY AWARD  
Mar 2020

Integrated Twilio into Flask app to send users daily challenges via WhatsApp

Created endpoints to respond to user interaction and track user statistics

## EXPERIENCE

### UNITY DATA VISUALIZATION INTERN

The Energi Simulator | Nov 2020 – Present

- Integrated VTK data visualization with Unity 3D
- Used Unity meshes to render reservoir data

### ANDROID DEVELOPER

Women Empowerment League | Jul – Sep 2020

- Worked with CEO to design Android app using Kotlin and Firebase
- Engineered appointment booking system, real-time chats, and user management

### WEB DEVELOPER

DreamCatchers Foundation | Jun – Aug 2020

- Created Wordpress plugin to automate matching seniors with volunteers, increasing operation efficiency by 200%

### DIRECTOR OF DATA SCIENCE EDUCATION

STEM Fellowship | Aug 2019 – Mar 2020

- Organized national data science competition for high school students
- Delivered data science workshops to over 200 students

### APPLICATION DEVELOPER INTERN

University of Calgary | Jul – Aug 2019

- Developed Python app using VTK to analyze auditory neural data in 3D
- Render neuron response data in frequency, intensity, and time domains

## PROJECTS

### 3D MULTIPLAYER MONOPOLY ↗

Dec 2020 – Jan 2021

- Used Unity and Photon Networking to build 3D monopoly game

### SMART GARDEN ↗

Oct – Dec 2020

- Full-stack Android app built in React Native for automated plant care
- Engineered Node.js REST API with MongoDB cloud database
- Facilitated serial port communication between server and Arduino
- Implemented height detection using OpenCV

### FITSPIRE | EXERCISE TRACKER ↗

May – Jun 2020

- Full-stack MERN fitness tracker
- Implemented authentication, email verification, and form validation