# SARA BARTHEL DE WEYDENTHAL

📍 WARSAW, POLAND

## ○ DETAILS ○

Warsaw
Poland
saraannabdw@gmail.com

## ○ LINKS ○

LinkedIn

Cash is Class- my social project

Personal website

## ○ COMPUTER LANGUAGES AND ○ FRAMEWORKS

jQuery

CSS

HTML

JavaScript

Python

Bootstrap

React.JS

Swift

## ○ LANGUAGES ○

Polish

English

French

## 💼 EMPLOYMENT HISTORY

### Junior Data Operations Engineer at Crystal Equation (subcontractor of Meta)
June 2022 — August 2022

I worked on the Data Operations Product & Services team on Meta's internal tools. The team functions as part of Meta's Enterprise Infrastructure and Security (EIS) Product and Analytics (EPA) team. I programmed Python analysis data pipelines to query diffs in SQL databases. I did back-end fixes in Hacklang and wrote front-end programs in ReactJS such as updating the Metastore. My work was committed to the Meta source code. I also shadowed my manager in interviews for which I underwent Meta interviewer training and learned how to evaluate technical candidates.

### Programming Instructor at Kids Code Fun
January 2018 — June 2021

Over the course of two years, I taught a weekly web development course (JavaScript, HTML, and CSS) on a beginner and intermediate level to students aged 10–14 (cumulatively over 40 people). Upon its completion, each student created a web-based, interactive game and was able to use JavaScript syntax freely. I also instructed individual workshops in Python and Scratch between 2018 and 2019. This included events at Google Campus Warsaw and Meta's Przestrzeń.

## ❧ EXTRA-CURRICULAR ACTIVITIES

### Stock Market Investor

I used the money I earned from teaching coding to invest in a mix of growth and blue-chip stocks. I conduct detailed technical and fundamental analysis for each share. I achieved a 7.4% ROI.

### Founder and Leader of a social project at Cash is Class (Polish: Kasa to Klasa)

I coordinated a team of 6 in designing a social media campaign. This involved researching topics, combining the work of team members, networking with sponsors and planning future posts. I also programmed the website and wrote articles on fundamental economics. The social project reached over 50 thousand people and my team became Finalists of the competition.

### Volunteer and Coding Teacher at Girls Code Fun

As a volunteer, I designed and executed a social media campaign on gender diversity in IT and Internet safety. I assisted with coordinating workshops at the TedxWarsaw event, where students of ages (6–18) were instructed coding. At this, and other events, I also taught individual coding classes to groups of 20 students in Python, JavaScript, and HTML.

### Deputy Student Body President

I organized annual Open Days for prospective students where I coordinated over 40 students and over a hundred candidates. I also gave a speech on behalf of the student body and headed Q&A sessions, working closely with the school's headmaster. I planned and managed virtual graduations involving musical performances and faculty speeches.

## ★ AWARDS

### Best Delegate award from Model United Nations for my role in the Economic Council

I researched and led the debate on eradicating poverty in my council while arguing in the interest of my delegated country, South Africa. In spite of not having veto power, I proposed possible solutions and became a sponsor of the resolution. My work, ultimately, led me to win the Best Delegate award.

**Participant Online School Stock Game organized by the Warsaw Stock Exchange**

By creating a strategy to mix safe and growth stocks from the Warsaw Stock Exchange, I devised a portfolio that resulted in an 18% ROI. Ultimately, I ranked 20th in Poland (out of 4000 participants) and 3rd in my voivodeship during the stock market simulation.

**Speaker at the Women In Tech Summit**

At the age of 16, I gave a speech titled "Girls May The Code Be With You" at Perspektywy Women In Tech Summit, which is the largest STEM conference for women in Central Eastern Europe. In the speech, I advocated for ways to encourage more girls to pursue computer science by using my experiences as a teacher to girls-only and co-ed groups. I proposed effective mentoring examples of all genders to make the IT world more diverse.

## ★ PERSONAL PROJECTS

**Programmed a personal website**

I designed and developed a portfolio website to showcase my work with HTML, CSS and JavaScript.

**Artificial Intelligence Facial Emotion Detection**

I programmed a Facial Emotion Detection program, which recognizes anger, happiness, sadness and surprise. I constructed a KNN model, Logistic Regression and a Decision Tree, of which the highest accuracy was 50.4%. After constructing a convolutional neural network (CNN) I reached an accuracy of 68%. My program could help autistic people with social communication.

**Stock Price Prediction Algorithm Based on AI**

I first built an algorithmic trading program with the use of dual moving average crossover and the yfinance API to determine the most profitable times to invest. I then improved it by building an LSTM neural network to predict future stock prices. The highest accuracy of the AI was 70% and it successfully modeled a stock's trend.

**Budgeting web-based app**

I programmed a budgeting app using Bootstrap, jQuery, HTML, CSS, and JavaScript. The app consisted of a budgeting plan and table for each category; a stock view that used the yfinance API, and a stock wishlist. The app also includes a login and register view, which is backed by Google's Firebase Authentication. The rest of the app, including the budget chart, tables, and modals, is backed by Google's Firestore.