

Work Experience

Software Development Contractor FrontStory February 2022 — Present

- Collaborated with product managers to solely maintain a Django-based campaign creation tool integrated with five different demand-side platforms (DSPs)
- Leveraged parallel processing to reduce creatives processing times by 60%, significantly minimizing request timeouts
- Delivered UI/UX improvements using jQuery and vanilla JavaScript to streamline campaign creation workflows
- Integrated a new DSP API
- Revamped the user management system, introducing a new user type to better support organizational needs
- Developed background and cron jobs to automate creatives housekeeping and reduce manual workloads
- Improved user engagement and targeting on websites through JavaScript-based interactive widgets, browser extensions, and advanced user identification methods
- Worked on enhancing a campaign management dashboard built with React

Freelance Software Developer (9 Jobs) May 2019 — January 2022

- Earned “Top Rated” status and sustained 100% Job Success and Client Recommendation scores on Upwork
- Implemented a financial analysis system using Google Apps Script API for a large-scale content publisher. Extensively optimized the system to run as quickly as possible under Google Sheets limitations

Education

B.Sc. in Computer Engineering Cairo University September 2016 — May 2021

Projects

project rev PyTorch, Hugging Face, Natural Language Processing (NLP)

- Conducted research, designed the architecture, and led a team of four in developing a five-module, audio-interactive, personalizable chatbot

Nabd React Native, Redux

- Incorporated internationalization, GPS tracking, and designed most user interface (UI) scenes and forms, helping the app become a \$60,000 government award finalist

kabsa C++, Lex, Yacc, Compilers

- Built a compiler that supports eight language constructs, detects semantic and syntactic errors, and generates code for a hypothetical stack-based machine

Othello (Reversi) Python, Artificial Intelligence (AI)

- Created a basic Othello game that supports two types of players: a human and a minimax alpha-beta pruning agent

Battleship Game 8086 Assembly

- Developed the ship-placement algorithm for the popular Battleship guessing game
- Emulated chat room scrolling using a queue data structure and 8086 Assembly graphics mode

Technical Skills

- **Programming Languages:** JavaScript/TypeScript, Python, C/C++, SQL
- **Frameworks & Libraries:** React, jQuery, Django, Serverless Stack Toolkit (SST), AWS SDK, AWS CDK
- **Tools & Services:** Git & GitHub, PyCharm, WebStorm, Amazon Web Services, Visual Studio Code