## Education

### University of Birmingham

Sep 2022 - Jun 2025

BSc of Computer Science (Predicted First)

• Relevant Coursework: Algorithms, Data Structures, Operating Systems, Computer Vision

### NTUU "Igor Sikorsky Kyiv Polytechnic Institute"

Sep 2021 – Jun 2022

BSc of Computer Engineering

- Completed foundational courses in Programming, Circuits, and Logic Design
- Recognized as one of the top-performing students in the program

## Experience

#### Interpreter (Summers 2022–2025)

Jul-Aug (Each Year)

WorldWide Language Resources - Operation Interflex

- Provided real-time oral and written interpretation of commands and safety instructions
- Assisted in the demonstration and explanation of tactical exercises
- Ensured seamless communication between departments, reducing operational errors

# **Projects**

#### Visualization | Educational Platform (GitHub, Python, PyTorch, Numpy, FastAPI, React, Docker)

- Built a custom NNUE network for chess board visualization and boosted the performance of the Sunfish engine.
- Demonstrated BFS, DFS, and A\* algorithms with real-time pathfinding exploration.
- Illustrated step-by-step decision-tree exploration for better game strategy understanding.
- Developed an interactive tutorial module, guiding users to build their own neural network from scratch for chess analytics.

#### Arduino Hand Tracking (Python, Arduino, OpenCV)

- Developed a gesture-based system detecting fingers in real-time
- Leveraged camera feed + OpenCV to identify hand landmarks
- Displayed results on an Arduino for instant visual feedback

#### DOTA 2 Website Replica (React, JS, Python)

- Created a replica of the official DOTA 2 website to match style, aesthetics, and functionality
- Emphasized responsive design and user experience for consistent layout across devices

### Reminder App (React, Python, Celery, FastAPI, SQLAlchemy, Docker)

- Built a containerized reminder application for scheduling tasks and timely notifications
- Implemented Celery for background job processing and FastAPI for a lightweight backend
- Implemented user authentication (e.g., JWT) ensuring secure access to reminders
- Employed **Docker Compose** to orchestrate containers (API, Celery workers, database), streamlining local development and production deployment

## Skills

- Proficient: Python, JavaScript, FastAPI, Git, Docker, React, SQLAlchemy
- Familiar: Celery, Next.js, PyTorch, Numpy, Pandas, AWS
- Databases: PostgreSQL
- Soft Skills: Problem Solving, Critical Thinking, Time Management, Reliability
- Languages: English (Fluent), Ukrainian (Native), Russian (Fluent)