IVAN ANTONINO ARENA

ivan.x28x@gmail.com \cdot +39 327 811 3812 \cdot ivanarena.github.io

EDUCATION

Technical University of Denmark

Copenhagen, DK

MSc Computer Science and Engineering; Major: Artificial Intelligence and Algorithms Università degli Studi di Padova

Oct 2023 – Present Padua, IT

BSc Computer Science; GPA 3.95/4.00

Sep 2020 – Jul 2023

EXPERIENCE

Qualcomm Technologies

Cork, IE

Software Engineer Intern May 2023

May 2023 – August 2023

- Designed and developed Flask app to run transformers AI models on AIC-100 accelerator.
- Contributed to Huggingface's open-source diffusers library with a custom pipeline for AIC-100 accelerator reducing code verbosity by 95%.
- Providing a single interface to test all the AI models improving efficiency.

Athesys Srl

Padua, IT

Software Engineer Intern

Mar 2023 - May 2023

- Set up SAML server in CentOS, RHEL and Ubuntu VMs using FreeIPA.
- Implemented proprietary OpenID Connect SSO on Linux covering 100% of the distributions used by the company.

SKILLS

Languages: C/C++, Python, JavaScript, HTML5, CSS3/Sass, LaTeX, SQL, PHP

Frameworks: React, Node.js, PyTorch, NumPy, Qt

Developer Tools: Git, Docker, Visual Studio Code, Jira, Linux, Jupyter Notebook, PostgresSQL, MongoDB

Projects

UnCAPTCHAble Node.js, React, Python, PyTorch, MongoDB

github.com/ivanarena/uncaptchable

- CAPTCHA API written in Node.js and Express.js, using MongoDB and Mongoose to store the tests.
- React demo to try CAPTCHA resolution.
- Test suite for a number of randomly retrieved CAPTCHAs against image classification and object detection AI PyTorch models.
- 100% probability of success against image classification, 96% against object detection.

QtChartifier C++, Qt

github.com/ivanarena/unipd-progetto-pao

- Chart-oriented Excel clone written in C++ with Qt library.
- Handle text or numeric data in a resizable table.
- Display data dynamically in five different charts.

CERTIFICATIONS AND PUBLICATIONS

Front End Development Libraries Developer Certification, representing approximately 300 hours of practice.	FreeCodeCamp Jul 2023
Back End Development and APIs Developer Certification, representing approximately 300 hours of practice.	FreeCodeCamp Jul 2023
Ready Trader Go Took part in Optiver's Hackaton.	Optiver Mar 2023
Code Jam 2022 Passed the Qualification Round.	Google Apr 2022
JavaScript Algorithms and Data Structures Developer Certification, representing approximately 300 hours of practice.	FreeCodeCamp Aug 2021
Responsive Web Design Developer Certification, representing approximately 300 hours of practice.	FreeCodeCamp Mar 2020