

## EDUCATION

<b>Montreal, QC</b> <i>Bachelor of Computer Science, CO-OP</i>	<b>Concordia University</b>	Sept. 2017 – Present
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## WORK EXPERIENCE

<b>Software Developer, Intern</b> <i>Institutional Securities Technology Division in an Investment Bank</i>	<b>Morgan Stanley</b>	Jan. 2022 – Apr. 2022 Montreal, QC
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<b>Software Developer, Intern</b> <i>Event-driven Trading Team in a High-frequency Trading Firm</i>	<b>DRW Trading</b>	May 2021 – Aug. 2021 Montreal, QC
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- Developed a Computer Vision solution to compare web snapshots and extract meaningful differences, using OpenCV, Scikit-image, and Tesseract OCR.
- Created an efficient mechanism to crawl, poll, and take screenshots of 800+ URLs daily, then store in a remote Ubuntu VM, using Python with Selenium and Docker.
- Built a REST API service to report HTTP failures and abnormal responses from URLs, using Python with FastAPI.
- Implemented a concurrent system and a Flask API service for queueing and processing jobs triggered by users.

Utilized: Python, Pytest, FastAPI, Flask, Django, OpenCV, Scikit-image, Tesseract, Selenium, Docker, REST API

<b>Undergraduate Research Assistant</b> <i>Concordia Data System Lab (CoDS) - under the supervision of Dr. Essam Mansour</i>	<b>Concordia University</b>	May 2021 – Aug. 2021 Montreal, QC
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- Integrated [SHAP](#) to a variety of Machine Learning models to explain how different inputs affect the end results.
- Utilized Python with XGBoost to train different classifiers using gradient boosting technique.
- Built an interface to demo the Knowledge Graph system using React.js and FastAPI.

Utilized: Python, Jupyter Notebook, SHAP, FastAPI, JavaScript, Node.js, React.js

<b>Software Developer, Intern</b> <i>Eclipse Theia Team (<a href="#">theia-ide.org</a>) in a Telecommunications Company</i>	<b>Ericsson Corporation</b>	Sept. 2020 – Apr. 2021 Montreal, QC
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- Contributed to [Eclipse Theia \(15k+ stars on GitHub\)](#) - an Open-source Cloud & Desktop IDE framework.
- Authored and developed [@theia/external-terminal](#) (2000+ weekly downloads) - a Theia package that contributes the ability to interact with native terminals, using TypeScript, Node.js, React.js, and Electron.
- Reduced average test wait time by nearly 90% in [theia-ide/theia-apps](#) (a set of 15 Docker images) by writing shell scripts and integrating the CI-CD workflow to GitHub Actions.

Utilized: TypeScript, JavaScript, Node.js, React.js, Electron, Docker, GitHub Actions, TravisCI

## LEADERSHIP EXPERIENCE

<b>Campus Expert</b> <i>GitHub Education Program</i>	<b>GitHub Education</b>	Oct. 2021 – Present Montreal, QC
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- Got selected by GitHub out of tens of thousands applications to build a diverse and inclusive technical community.

<b>Vice President of Technology</b> <i>Technology Team</i>	<b>HackConcordia</b>	May 2021 – Present Montreal, QC
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- Leading tech team to plan and prepare the technical infrastructure for ConUHacks - Montreal's biggest hackathon.
- Deployed [hackconcordia.io](#) website (node.js and express.js web app) using Docker and Nginx on Digital Ocean.

<b>CO-OP Mentor</b> <i>Institute for Co-operative Education</i>	<b>Concordia University</b>	May 2021 – Sept. 2021 Montreal, QC
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## PROJECTS

**Personal Website:** [ducnguyen.dev](#) (for additional information and projects)

**CleverICE - 1st Place of Intact Challenge in TOHacks 2021 (out of 41 submissions)** ([DukeNgn/CleverICE](#))

Efficiently built back-end service, integrated GPT-3 Open-AI, and created customer database on CockroachDB for CleverICE - a web app that speeds up the insurance claim process for customers.

Utilized: Python, Flask, Open-AI, Cockroach SQL, CockroachDB

## SKILLS

**Programming:** Python, TypeScript, JavaScript, Java, C++

**Technologies:** Git, Electron, React.js, Express.js, Node.js, Flask, FastAPI, Django, MongoDB, CockroachDB, Docker