Duc Nguyen

ducnguyen.dev
triduc.nguyen@mail.concordia.ca

+1-(514)-754-2030
github.com/DukeNgn
linkedin.com/in/ductringn

EXPERIENCE

Concordia University – Undergraduate Research Assistant Montreal, QC
Concordia Data System Lab (CoDS) - under the supervision of Dr. Essam Mansour *June. 2021 – Present*
- Integrate SHAP to a variety of Machine Learning models to explain how different inputs affect the end results.
- Utilize Python with XGBoost to train different classifiers using gradient boosting technique.
- Build an interface to demo the Knowledge Graph system using React.js and FastAPI.

HackConcordia – Director of Technology / Software Developer Montreal, QC
Technology Division *June. 2021 – Present*
- Plan and prepare the technical infrastructure for ConUHacks 2022 - Montreal's biggest annual hackathon.

DRW Trading – Software Developer Intern Montreal, QC
Event-driven Trading Division in a High-frequency Trading Firm *May. 2021 – Present*
- Develop a Computer Vision solution to compare web snapshots and extract meaningful differences, using OpenCV, Scikit-image, and Tesseract OCR.
- Implement an efficient mechanism to crawl, take screenshots of 800+ URLs daily, then store in a remote Ubuntu VM, using Python with Selenium and Docker.
- Build an alert system to report HTTP failures and abnormal responses from URLs.

Ericsson – Open-source Software Developer Intern Montreal, QC
Eclipse-Theia Team (theia-ide.org): Open-source Cloud & Desktop IDE framework *Sept. 2020 – April. 2021*
- Authored and developed @theia/external-terminal (1000+ 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 integrating the CI-CD workflow to GitHub Actions.
- Authored and maintained Selene IDE – a cross-platform IDE based on Theia for illustration purpose.
- Carefully reviewed and tested code from the open-source community to close/merge pull requests.

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

COVID-19 Detector - HackThe6ix 2020 (DukeNgn/covid19-detector)
Led a team to build a web app that determines the probability of a person contracting with COVID-19 based on Chest CT Scan images. A Machine Learning model was trained on Azure platform with Python and Flask to perform the tasks.
Utilized: Python, Flask, HTML/CSS, JavaScript, Bootstrap, Azure Custom Vision, Azure Deployment

EDUCATION

Concordia University Montreal, QC
Bachelor of Computer Science, Software Systems CO-OP *Sept. 2017 – Present*
McGill University - Desautels Faculty of Management
Personal Finance Essentials (Certificate) *Jul. 2020*

VOLUNTEER & SOCIETY

Concordia Institute for Co-operative Education: CO-OP Mentor
Unmanned Aerial Vehicles (UAV) Concordia: Software Team Member
Golden Key Honor Society - Concordia Charter: Honor Member

SKILLS

Programming: TypeScript, JavaScript, Java, Python, R, C++
Tools: Git, Docker, Node.js, Electron, React.js, Flask, MySQL, Jekyll
Platforms: GitHub, GitLab, TravisCI, GitHub Actions, Microsoft Azure, Google Cloud, Heroku
Others: Vim/NeoVim, Emacs, LaTeX, Markdown
Languages: French (Intermediate), English, Vietnamese