John Nguyen







EDUCATION

Carleton University, Ottawa

September 2019 - May 2024

Bachelor of Computer Science (Honours)

- In-depth understanding in Discrete Structure, Web Applications, Computer System Security, and Distributed OS
- Proficient in multiple programming languages (Python, Java, C, C++, JavaScript, HTML), with confidence and experience in database management

APPLIED PROJECTS

Twitch-inspired Streaming Simulator (Personal Project)

- Developed a Twitch-inspired streaming simulator featuring a fully interactive UI with simulated viewers and dynamic chat interactions
- Implemented screen sharing and YouTube embed support, enhancing the realism of the streaming experience
- Designed an extensive chat control system with multiple commands, allowing for customizable viewer behavior and moderation

Interactive Ubuntu Terminal Simulator (Personal Project)

October 2024

- Developed a fully functional Ubuntu terminal simulator with JavaScript, HTML, and CSS, featuring a dynamic GUI and realistic command-line behavior for an intuitive user experience
- Implemented over 10 commonly used Unix commands, providing natural behavior and functionality consistent with an authentic terminal, enhancing the realism of the simulation

Static HTML Portfolio (Personal Project)

September 2024

- Developed a static HTML portfolio website hosted on GitHub Pages to showcase projects, professional experience, and personal background
- Customized a free HTML/CSS template to implement responsive design and interactive features, enhancing user experience with minimal modifications
- Integrated project details, skills, and contact information into a clean, structured layout for professional visibility

Sudoku Game/Solver (Personal Project)

August 2024

- Developed 2 versions of Sudoku game with Graphical User Interface using Python and JavaScript/HTML
- Employed an advanced backtracking algorithm combined with real-life Sudoku penciling techniques to instantly solve any Sudoku board

PROFESSIONAL EXPERIENCE

BlackBerry ONX (Kanata, Ontario, CAN)

May 2022 – Dec 2022

Command Line Tools (Co-op/Internship)

- Focused on Unix, Linux OS, Bash scripting, Python scripting, and C programming
- Tested compatibility of over 300 GNU commands and their flags in BlackBerry's QNX OS
- Performed bug testing on 40s 'verification' JIRA tickets as well as resolving over 20 JIRA bug tickets submitted by other testers and BlackBerry's customers
- Developed **Python log parser** to extract and convert data from over 250,000 test logs on internal report server database into easily readable format

SKILLS

Languages: Python, Java, C, C++, BASH, Shell, HTML, CSS, JavaScript, MatLab, Lisp, SOL

Frameworks: Node.js, Qt

Tools: Pytest, TKinter, GDB/PDB, Git, SQLite, RESTful API, Linux, Windows OS, Oracle VM VirtualBox, CVAT, YOLO