Nicholas Vadivelu

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LINKS

- nicholasvadivelu.com
- github.com/n1ckx2
- linkedin.com/in/nicholasvadivelu

CODING SKILLSET

Over 2 years of experience
Java • PHP • HTML5 • CSS3

Over 1 years of experience
MATLAB • Python • C++ • LaTeX

ACHIEVEMENTS

StarterHacks 2017 (40 teams)
- Top Developer Hack
- Top Amazon Web Services Hack

DataHacks 2016 (20 teams)
- Overall Runner-up

ECOO Programming Contest
- Finalist (2016)

Canadian Computing Competition
- Top 15 % (Senior, 2016)
- Top 1.3 % (Junior, 2015)

ORGANIZATIONS

TOPS Webteam
President (2014–2017)

Engineers Without Borders
Member (2014-2015)

EDUCATION

MARC GARNEAU CI
High School Diploma
Expected Jul 2017 | Toronto, ON
Student in TOPS Program: a rigorous math, science, and English program.
Grade 12 Average: 95.0%
Volunteer Hours: 1180.5

EXPERIENCE

DIRECTOR OF WEB DEVELOPMENT | The Reckoner of MGCI
Expected Sep 2016 – Jun 2017 | Toronto, ON
Formerly Web Developer, Sep 2014 – Jun 2016
- Won best Electronic Newspaper (2016) at the Toronto Star Awards
- Initiated redevelopment of The Reckoner Android Application
- Created 20-page website usage and development guide
- Updated thereckoner.ca using Wordpress, PHP, HTML, and CSS

SCIENTIFIC DATA MANAGER | TOPS Algonquin Expedition
Expected Mar 2016 – May 2017 | Toronto, ON
- Helped run 4-day research trip for 60 grade 10 TOPS students
- Assessed and graded the quality of the research conducted by the students
- Taught students to use scientific equipment such as magnetic field, flow rate, and temperature probes with the Vernier LabPro software
- Organized practice simulations to prepare students for data collection at Algonquin Park

HIGH SCHOOL SUMMER INTERN | McMaster University
Jun 2016 – Aug 2016 | Hamilton, ON
- Conducted a study in Silicon Photonics at the Engineering Department
- Presented a research poster on the Effects of Thermal on Terbium-doped Silicon Oxide Thin Films
- Installed and wrote Standard Operating Procedures manual for an Intun TLX-B Laser. Began automating laser using MATLAB
- Over 200 hours of lab experience with equipment such as a variable angle spectroscopic ellipsometer, annealing furnace, photo-luminescence system, and other optical devices

PROJECTS

RAPCHATZ CHAT BOT | Node.JS, Amazon Alexa, Heroku
Mar 2017 | StarterHacks 2017
Receives a keyword through Facebook messenger or the Amazon Echo and finds a matching rap line based on rhyming and context. Created in a team of 5.

PIXELSHOT 300 CAMERA | Java, Arduino
Nov 2016 – Jan 2017
One-pixel camera that can capture a 300-by-300 photo in 5 minutes. Software controls motors and sensors, undistorts a fisheye image, demosaics a Bayer colour filter image, and balances colours and brightness. Created in a team of 4.

MAGNETIC FIELD SIMULATOR | MATLAB
Dec 2016
Simulates and visualizes magnetic field interactions between 2+ solenoids.

THRIVE LIFE SIMULATOR | Java
Dec 2015
Simulates a complex dinosaur ecosystem with natural disasters, breeding, hunting, disease, aging, and simple genetic variation. Created in a team of 3. Wrote 3D ray-casting engine from scratch.