

# Akathian SANTHAKUMAR

## Student

akathian.github.io

 [github.com/Akathian](https://github.com/Akathian)  [linkedin.com/in/akathian](https://www.linkedin.com/in/akathian)

 (647)-882-7285  [akathian.santhakumar@mail.utoronto.ca](mailto:akathian.santhakumar@mail.utoronto.ca)

 18 Swan Park Rd, Markham L6E 1Z8

Ambitious and self-directed 4th-year student **double majoring in Computer Science and Neuroscience**. Strive in highly collaborative work environments and enjoy solving challenging problems. Comfortable using Linux/Ubuntu and MacOS as a daily driver. Possess excellent work ethics, allowing for efficient work flow and exceptional attention to detail. Hope to one day make breakthroughs in the artificial intelligence field, applying advanced knowledge in neuroscience and computer science topics.

## KEY COMPETENCIES

Programming	Python, Node.js/JavaScript, Java, TypeScript, JQuery, CSS, C
Artificial Intelligence Technologies	Machine Learning (Tensorflow, Keras, AWS SageMaker), Computer Vision (OpenCV, Darkflow, Mediapipe)
Developing Experience	Back-End (Node.js, Flask), Front-End (Angular, React.js), IoT (Raspberry Pi Edge Computing), QA (JUnit, Mocha/Chai, Python unittest, Jenkins), UI/UX Design (Angular, AWS Sumerian)
Developer Tools	Git (GitFlow), AWS (SageMaker, Rekognition, Comprehend, Lex, Elastic Beanstalk, SQS, SNS, EC2, CodePipeline, S3, Sumerian, CloudWatch, RDS), Google Firebase (Hosting, Auth, Real-time Database)
Database	MySQL (MySQLWorkbench), NoSQL (Firebase Realtime Database), SQLite (DB Browser), Excel
Others	Agile Methodologies (Jira), Research & Development

## EXPERIENCE

September 2019 April 2020	<b>Innovation Engineer (R&amp;D Application Developer), CIBC, Toronto, ON</b> One of seven members of an agile R&D team following SDLC practices prototyping an interactive digital assistant for CIBC corporate and client use cases. <ul style="list-style-type: none"><li>Developed a queueing system using Node.js to determine event processing order</li><li>Wrote extensive mocha/chai unit tests for the server's Node.js backend</li><li>Built a neural network predicting user's overall sentiment based on their gestures, facial expression and what they say so that the assistant can change how she answers the user's questions.</li><li>Performed research on finding technologies for solutioning the assistant's learning model, UI controls, microphone, and camera set-ups</li></ul> <div>Node.js Python (AI &amp; Edge Computing) AWS Agile Git (GitFlow) MySQL Mocha/Chai React.js IoT Jira</div>
December 2018 September 2018	<b>French Coding &amp; Robotics Teacher, SYLVAN OF UNIONVILLE, Markham, ON</b> <ul style="list-style-type: none"><li>Taught groups of up to 16 children from grades 3-6 basics of coding through block coding software</li><li>Explained fundamentals of coding such as variables, loops and conditional statements</li><li>Broadened students' knowledge on real world applications of robotics</li></ul> <div>Block Coding (Tynker) LEGO WeDo 2.0 Java Python French</div>

## PROJECTS

### OVVISUALS ECOMMERCE WEBSITE

2020

[ovvisuals.com](https://ovvisuals.com)(Master Build) [ovvisuals-dev.web.app](https://ovvisuals-dev.web.app)(Development build)

Building a fully fledged ecommerce web-app for OVVisuals (arts), allowing paypal payments, user login and other functionalities using multiple APIs.

- Connected users to their data such as their cart, orders and wishlist using NoSQL Firebase Realtime Database
- Used Bootstrap styling to render the website more appealing and facilitate implementation of interactivity
- Created reusable Angular components to keep the code for the website clean and organized

Angular CLI Google Firebase TypeScript HTML CSS JQuery Bootstrap Git NoSQL

## EDUCATION

September 2017 - April 2022 **Candidate, Honors Bachelor of Science** *University of Toronto Scarborough*. Major in Neuroscience, Major in Computer Science 4<sup>th</sup> year. GPA : 3.15 out of 4.0