110 Jurong East St. 13
#04-298
Singapore 600110

NIKHIL RAGHAVENDRA

+65 9647 7492
raghavendranikhil@gmail.com
www.github.com/nikhilraghava

EXPERIENCE

Microsoft Student Partner   **Microsoft Corporation**   **May 2017 – February 2019**

- Tasked with learning, sharing and teaching technical content related to computing and Microsoft.
- Facilitated events like the Microsoft DigiGirlz Day and hosted workshops on campus promoting Microsoft products and services.

Software Developer, Intern   **Enhanzcom Pte. Ltd.**   **March 2018 – April 2018**

- Helped develop an enterprise scale human resource and logistics management software.
- Improved the user interface of the existing Enterprise Resource Planning software with Polymer Web Components.

Research Student   **Cancer Science Institute of Singapore**   **October 2013 – December 2013**

- Embarked on a research project at the Cancer Science Institute of Singapore on my own accord.
- Researched the effectiveness of a biological ligand in preventing metastasis in a project titled: "The PPARγ Ligand: A Molecule to Improve the Efficacy of Oxidative Therapy".
- Published my findings to the Google Science Fair 2014.

EDUCATION

Diploma in Computer Engineering   **Singapore Polytechnic**   **2016 – 2019**

- Coursework: Microprocessor Systems Programming, Embedded Computer Systems, Advanced Microcontroller Technology, LAN Switching & Wireless, Digital Electronics, Engineering Mathematics

Diploma Plus in Software Programming and Applications

- Coursework: C# Programming, Spreadsheet Programming & Database Management, Object-Oriented Development, .NET Applications

HONORS & AWARDS

2nd Prize   **Airbus-SSTA HADR Challenge**   **2019**

- Organized by Airbus Defence and Space, Singapore Space and Technology Association and supported by the Singapore Civil Defence Force and Changi Regional HADR Coordination Centre.
- Built a long-range radio handset *(Technology: LoRa Mesh implemented under the OpenThread specification)* for survivors to communicate with rescuers and Command & Control operators after a natural disaster via high altitude pseudo-satellites.
- Showcased the project at the Global Space and Technology Convention 2019, an event attended by senior management from international space agencies such as JAXA (Japanese Space Agency), ESA (European Space Agency), and representatives from Airbus, Arianespace, and Virgin Orbit.

Champion   **Bosch Ville Hackathon**   **2018**

- Organized by Robert Bosch GmbH.
- Conceptualised and built an urban agricultural toolkit that included sensors, machine learning and cloud computing to help farmers grow their crops more productively.
- Showcased the project at Bosch Ville 2018, an event attended by chief executives and senior management from multinational corporations and Small and Medium Enterprises.

2nd Prize & Visitor's Choice Award   **AWS Cloud Technology Hackathon**   **2018**

- Organised by Amazon Web Services (AWS) and co-organized by the KK Women's and Children's Hospital.
- Developed a service to transcribe, organize and translate information from doctor-patient consultations, making information concise and easy for patients to understand.
- Showcased the project at the AWS Public Sector Summit 2018, an event attended by leaders from government, education, nonprofits, and research organisations.

Merit Award   **SUSS-Microsoft Analytics Hackathon**   **2018**
- Organized by the Singapore University of Social Sciences.
- Developed an automated system to optimize the delivery order assignment and route schedule for food delivery riders.

Bronze Medalist   **International CB Paul Science Quiz**   **2015**
- Organised by the Anglo-Chinese Junior College (ACJC) Science and Mathematics Council, the Nanyang Technological University (NTU) and National University of Singapore (NUS).
- Quizzed on mathematics, chemistry, physics, biology, astronomy and computer science.

Merit Award   **Singapore Junior Chemistry Olympiad**   **2015**
- Organised by the Singapore National Institute of Chemistry (SNIC) in partnership with NUS, NTU, SUTD and Nanyang Polytechnic and supported by the Ministry of Education (MOE).
- Tested on the theory and practice of chemistry.

SOFTWARE PROJECTS

Personal Website: *www.geekfile.xyz* (for additional information and projects)

OpenAI Gym CartPole-v0
- Solved OpenAI's CartPole-v0 Gym environment; placed at the top of the leaderboard for two days.
- Implemented a CLDNN using TensorFlow to balance a pole attached by an un-actuated joint to a cart moving along a frictionless track in a simulated environment.
- Utilized: Python, OpenAI Gym, TensorFlow, NumPy

Parsley
- Developed a service that recommends recipes based on ingredients available to the user, and users watch YouTube videos on how to cook the recommended dishes.
- Featured in a promotional video for Amazon Web Services (AWS), showcasing Parsley and its integration with various AWS services.
- Utilized: Python, scikit-learn, NumPy, Pandas

Fabventory 3.0
- Developed a Naïve Bayes Classifier to recommend projects to students based on parts checked-out from the inventory at Singapore Polytechnic's FabLab.
- Utilized: Python, scikit-learn, NumPy, Pandas

SP Siri Shortcuts
- Developed a Siri Shortcut which allows Singapore Polytechnic students to obtain timetable listing for the day with just a tap or by asking Siri.
- Utilized: Siri Shortcuts

SKILLS

- **Development:** *(proficient)*: Python, Swift, Java, Unix, Git, *(familiar)*: C, C++, C#
- **Front-End Development:** *(proficient)*: HTML5, CSS, JavaScript
- **Back-End Development:** *(familiar)*: Node.js, PHP
- **Virtualization:** *(proficient)*: VMWare, *(familiar)*: Docker CE, Citrix XenServer
- **Cloud Computing**: (proficient): Amazon Web Services, *(familiar)*: Firebase, Azure