# ARYAA VIVEK PAI

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## **EDUCATION**

Cornell University, College of Engineering

**GPA: 3.99** Degree Expected: Spring 2022

Candidate for Bachelor of Science in Computer Science

Dean's List

**Minors:** Electrical and Computer Engineering • Business Management

Current Courses: Analysis of Algorithms • Intro to Machine Learning • Computer Graphics • Artificial Intelligence Practicum Relevant Courses: Foundations of Artificial Intelligence • Functional Programming • Data Structures and Object-Oriented Programming • Discrete Structures • Backend Development • Digital Logic and Computer Organization • Embedded Systems

Gems Modern Academy, Dubai, United Arab Emirates

Spring 2018

Valedictorian

#### RELEVANT EXPERIENCE

#### Scientia Innovation Pvt Ltd, Bengaluru, India

Summer 2020

Full Stack Development Intern

- Developed and customized a marketplace website for educational products using the Magento Platform, HTML, PHP and CSS.
- Worked with a team of two developers to create an app for the marketplace using Flutter.

McMahon Lab, Ithaca, NY

Spring 2020-Summer 2020

Research Assistant

Optimize the k-SAT solver and Coherent Ising Machine simulator using Parallel Programming on FPGAs.

## Cornell University Computing and Information Science Department, Ithaca, NY

Functional Programming and Data Structures, Teaching Assistant

Spring 2020-Fall 2020

Introduction to Computing using Python, Undergraduate Course Assistant

Fall 2019-Present Fall 2018-Present

# Cornell University Autonomous Underwater Vehicle, Ithaca, NY

Member of the Electrical Team

Developed sensor board for data acquisition and thruster board to control brushless motors using electronics speed controllers.

Designed schematic and layout in KiCAD; Hand soldered; Integrated with firmware using SPI and I2C for communication.

NTN, Mumbai, India Summer 2017

Software Engineering Intern

Collaborated with the Software Engineering team to develop a database system to keep track of the product development process.

# RELEVANT PROJECTS

Cadence Summer 2020

Collaborated with a team of three to create a music training system that relates sheet music to physical piano keys.

Develop an app that translates sheet music to audio files using OpenCV and recognizes the musical notes in an audio file.

CroK64 Spring 2020

Created a two-player online version of croquet implemented entirely on the NXP FRDM-K64 board.

Used UART and I2C to transmit data between the on-board sensors and the laptop; TCP for internet communication.

Fall 2019

- Developed a chat-bot for students to maintain their schedule and get Cornell specific information using OCaml.
- Used object-oriented programming techniques, data structures and functional programming.

Spring 2019

- Backend developer for the forum app that helps students to learn about events at Cornell and post their own events.
- Used Flask and SQL to facilitate query requests to the Cornell Events API.

#### **SKILLS**

Programming Languages: Java • Python • C • OCaml • Dart • QBASIC • HTML • CSS • SQL

Tools: Magento • Flutter • Swift • KiCAD • Verilog • Blender • Docker

Languages: Hindi [Fluent Writing] • Marathi [Fluent] • Kannada [Fluent] • French [Proficient in Reading and Writing]

### **CAMPUS ACTIVITIES**

Creative Computing Club, Virtual Reality Game Developer

Herbert Johnson Museum of Art, Visitor Services Intern and Training Assistant

Student Union Board Willard Straight Hall, President

Cornell University Big Red Marching Band, Flute Section Member

Fall 2019-Present Fall 2018-Present Fall 2018-Present Fall 2018-Spring 2019

## COMPUTER SCIENCE COMMUNITY

Grace Hopper Celebration, Received Scholarship to Attend the Conference

Rewriting The Code, Part of the Fellowship

Women Engineers CODE, Conference Attendee

Women in Computing at Cornell, Active Member

Fall 2020

Fall 2020 – Spring 2021 Spring 2019

Spring 2019-Present