# **Anirudh Narsipur**

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#### **EDUCATION**

## Brown University, Sc.B. Computer Science

Providence, RI | Expected Graduation May 2024

Coursework:

Computer Science: Data Structures/Algorithms, Systems, Programming Languages, Formal Methods, Bioinformatics

Mathematics: Statistics, Linear/Abstract Algebra, Multivariable Calculus

Biology: Genetics, Techniques in DNA Analysis

### **EXPERIENCE**

# Myraa Technologies, (Intern)

Virtual | June 2020 - Aug 2020

- Developed an ultra-low resource keyword recognition system for Android devices using Java/C++
- Deployed K-Nearest Neighbors with Dynamic Time Warping for core recognition system
- Designed and developed keyword recognition pipeline and associated user interface.

#### **Brown U Teaching Assistant (Formal Proof and Verification)**

June 2020 - Present

- Part of course staff teaching inaugural course on using Lean to formalize mathematics and verify program behavior.
- Assisted in course design, grading and feedback of weekly problems sets and held office hours.

#### **Brown U AI Lab Research Assistant**

Oct 2020 - April 2021

 Worked on improving search transparency in neural nets and refinements to transformer models for time series under Prof Eickhoff.

#### **Projects**

#### **Distributed Concurrent Server**

• Implemented core of a modern distributed multi-threaded server in C++ using the gRPC framework

#### **Pyret Matrix Library**

• Developed a matrix library for Pyret, a scripted functional programming language under Prof. Krishnamurthi.

#### **FallDetector**

• Designed and developed an Android app that uses Deep Learning to detect falls in elders (a common cause of serious injury) and send out emergency alerts

#### **Operating System Verification**

• Formally modeled and verified key properties of Operating System memory management such as process isolation with the aid of an SAT solver.

#### Pivot

 Developed Pivot, an assistive toolbox for online learning with features such as transcription, polling using React for IvyHacks 2020. Awarded

#### **Competitive Programming**

• Qualified to national round (India) of International Computing Olympiad. Led high school team to success at numerous competitions.

## **SKILLS & INTERESTS**

**Programming:** Python, Java, C/C++, R,Lean, Racket **Tools:** Git, Linux, GDB, Vim, Pandas, NumPy, TensorFlow

**Language:** English, Hindi, Kannada **Clubs:** Formula Racing, Debating Union