

Anirudh Narsipur

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EDUCATION

Brown University, Sc.B. Computer Science (GPA: 3.75)

Providence, RI | **Expected Graduation May 2024**

Coursework:

Computer Science: Machine Learning, Data Structures/Algorithms, Systems, Programming Languages, Bioinformatics

Mathematics: Statistics, Linear/Abstract Algebra, Multivariable Calculus, Advanced Statistics

Biology: Genetics, Techniques in DNA Analysis, Functional Genomics

EXPERIENCE

Amazon AWS Automated Reasoning Group (SDE Intern)

Seattle | May 2022 - Aug 2022

- Developing cloud based workflow using DynamoDB, SQS and S3
- Deployed code to production

Brown U Teaching Assistant (Formal Proof and Verification, Logic For Systems)

June 2021 - May 2022

- Head TA for a 100 person course, managing course staff of 10.
- Responsibilities include developing assignments, holding office/lab hours and grading
- I have also TA'ed a smaller advanced course focusing on formal verification.

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.
- System was used as prototype to build edge device services for customers

Projects

Identifying Transcriptional Motifs

- Implemented Gibbs Sampling with markov chain background model to identify transcriptional motifs in tuberculosis.

Vehicle Routing Problem

- Used Local Search heuristics and integer programming to identify solutions to the vehicle routing problem

Distributed Concurrent Server

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

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.

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

Automated Declaration Checker

- Built platform to automatically check and synthesize computer science declarations for the Brown CS department using Z3 SMT solver.

Pivot

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

Pyret Matrix Library

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

SKILLS & INTERESTS

Programming: Python, Java, C/C++, Racket

Tools: Git, Linux, GDB, Vim, Pandas, NumPy, TensorFlow, AWS Services

Language: English, Hindi, Kannada

Clubs: Theater, Debating Union