

Arun Ramachandran

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Personal Info

Nationality: USA

Education

National Institute of Technology, Trichy

B. Tech.

Computer Science and Engineering

2014-2018

CGPA 8.43

Links

github.com/jhurricane96

linkedin.com/in/aramach

Languages

C • C++

HTML • CSS

JavaScript • SQL

Intermediate

Java • Python

MATLAB/Octave

L^AT_EX

Tools & Tech

Web | Backend

Node.js • Express.js

MongoDB • Socket.io

Web | Frontend

jQuery • Bootstrap

WebGL with Three.js

Platforms

AWS • Serverless

Voice Recognition with

Alexa Skills Kit

Build Tools

ANT • CMake • npm

Version Control

Git

Experience

Oct 2016–Now

Code Character

Lead Programmer

- Event in Pragyan '17, the international techno-management festival of NIT Trichy. Players upload AI to control troops in a real-time strategy simulation.
- Leading a team of nine programmers to make an automated multi-threaded simulator in C++ that can run both with a renderer and in headless form.
- Providing sophisticated path planners to move troops in formation using graph searching and steering behaviours.
- Using CMake to provide easy cross-platform builds of dynamic libraries.

May–Jul 2016

Amazon Development Center, India

Software Engineer Intern

- Worked on an Echo-driven Tech Conference, where Amazon Echo devices use voice recognition to act as help desks and MoC's.
- Modelled MoC dialog as a state machine to enable effortless dialog deployment even during production. Made query responses dynamic to reflect schedule changes.
- Made fully serverless backend with AWS and wrote integration tests with Mocha. Used JWT for stateless authorization and authentication.
- Successfully deployed and used by over 150 people in Amazon's India Tech Conference '16.

Projects

Apr–Oct 2016

Chess AI

github.com/jhurricane96/chessai

- Made a self-learning chess AI, which learnt weights from old games using temporal difference learning.
- Used piece values and piece square tables for move evaluation.
- Used MTD-f with Alpha-Beta Negamax and transposition tables for move selection.

Aug–Sep 2015

Grav Guy

festember.com/~arunr

- Made a 3D video game with WebGL and Three.js to promote Festember '15, the national inter-collegiate cultural festival of NIT Trichy.
- Received over 16,000 plays.

Awards

Aug 2016

InOut

2nd place

Made a voice-based interactive bot that teaches students over a basic telephone and answers basic queries, all in Hindi, for InOut '16, one of India's largest student-run hackathons, hosted by NIT Surat.

Apr 2016

Ventura

Best Business Model

Won 'Best Intra NITT Business Model' in Ventura of E-Summit '16, a national level hackathon and entrepreneurship summit conducted by E-Cell, NIT Trichy.

Feb 2016

Three's a Crowd

3rd place

Showcased ability to split tasks effectively and to work efficiently in a team in Pragyan '16, the international techno-management festival of NIT Trichy.

Jan 2016

Onsite Programming Challenge

2nd place

Showcased knowledge of and aptitude for programming and algorithms in Vortex '16, the national level technical symposium of the department of Computer Science and Engineering, NIT Trichy.

Jan 2016

Code O Soccer

3rd place

Coded robots to play soccer using finite state machines in Kshitij '16, Asia's largest techno-management festival conducted by IIT Kharagpur.