

# 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](https://github.com/jhurricane96)

[linkedin.com/in/aramach](https://linkedin.com/in/aramach)

## Languages

C • C++

HTML • CSS

Javascript

Intermediate

Java • Python

MATLAB/Octave

L<sup>A</sup>T<sub>E</sub>X

## 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

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.
- Used the Alexa Skills Kit and Java to build the Voice User Interface.
- Built a fully server-less back-end to power multiple clients with Node.js, AWS and Server-less. Used JWT for authorization and authentication.

## Projects

Apr–Oct 2016

**Chess AI**

[github.com/jhurricane96/chessai](https://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](https://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**

2<sup>nd</sup> 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**

3<sup>rd</sup> 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**

2<sup>nd</sup> 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**

3<sup>rd</sup> place

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