Akshay Deodhar

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Education

College of Engineering, Pune Computer Engineering, CGPA 9.62

Pune August 2017 - Present

Pune

2015 - 2017

Pune

BVB's Paranjape Vidya Mandir SSC, 95.2%

Fergusson College

2005 - 2015

Work Experience

HSC, 92.4%

COEP Satellite Team

Pune

November 2017 - Present

Attitude Determination and Control Subsystem

- Writing and mantaining code for simulating motion of satellite
- Integrating publically available modules into simulation
- Programming a continuous-thrust orbit simulation by interfacing orbit propagator with python code

Projects

Trillian- a command-line chess game

Data Structures and Algorithms project

- Compatible with Forsyth-Edwards format
- Move validation and legal move generation
- Minmax with alpha-beta pruning used for game tree search
- Reasonably competent engine, beats novices

Fractals, Automata and more

Exploring Python

- Generalised module for creating fractals using L-systems
- Module for observing Cellular Automata using pygame
- Simple games, models in pygame

Publications

• Attitude Control Using 3 Axis Magnetorquers and Pitch Axis Reaction Wheel for Solar Sailing Satellite COEPSAT-2

69th International Astronautics Congress (IAC) Bremen, Germany. Co-authored with 6 others

Skills

• Programming

- Proficient: C, Python
- Familiar: Scheme, x86 Assembly, Bash, C++
- Tools
 - Unix utilities, Git, IAT_FX, Gnuplot, Make
- Languages
 - English, Marathi, Hindi

Extra-Curricular Activities

- Chess team School, Fergusson, COEP
- Abhiyanta COEP's magazine club
- Personal blog
- Bri9k.github.io

Hobbies

Love reading fantasy, science fiction, and farce. Enthusiastic about trekking. Listen to (and attempt to play on harmonium) all kinds of music. Write a bit of limerick.