+91-9151619496

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vivekthazhathattil@gmail.com

06 June 1997

VivekThazhathattil

TECHNICAL SKILLS

C/C++
Expert

Python
Expert

MATLAB/ Octave
Expert

HTML/CSS
Proficient

JavaScript
Proficient

Java
Intermediate

BASH
Intermediate

ReactJs
Intermediate

LANGUAGES

Malayalam
Native

English
Fluent

Hindi
Intermediate

ACHIEVEMENTS

24th rank in GATE, 2019 — August 2019
GATE, MHRD

Managed to secure 24th rank in Graduate Aptitude Test in Engineering (GATE) in Aerospace Engineering with an overall score of 799/1000.

99.4 percentile in IIT-JEE 2015 — June 2015
CBSE

Achieved 99.4 percentile in IIT-JEE Mains, 2015 and qualified the JEE Advanced exam, the UG entrance exam for admission into IITs.

50th rank in KEAM, 2015 — June 2015
CEE, Govt of Kerala

Secured 50th rank in Kerala Engineering Architecture Medical entrance examination out of more than 90,000 students. Scored 862/960 marks.

8th rank in RAYS Young Genius Award, 2013 — August 2013
RAYS institution

Secured 8th rank in RAYS Young Genius Award program for excellence in academics.

Vivek T.

Aerospace Engineer

Research Interests: UAV design, Combustion in high-speed flows

EDUCATION

Indian Institute of Science (IISc), Bangalore — (August 2019 - August 2022)
Master's Degree Aerospace Engineering — 8.0

Currently in the third semester.

Indian Institute of Technology Kanpur — (January 2015 - August 2019)
Bachelor's Degree Aerospace Engineering — 7.0

Vijayagiri Public School, Chalakudy — (June 2013 - June 2015)
XII (CBSE) — 95.6%

Silver Hills Public School, Kozhikode — (June 2012 - June 2013)
X (CBSE) — 95%

PROJECTS

B.Tech Project: Conceptual Design of a Twin-Boom Fixed-Wing VTOL UAV — (May 2019 - July 2019)

Thesis supervisor: Prof. Ajoy Kanti Ghosh, IIT Kanpur

- Conceptually designed a twin-boom fixed-wing VTOL UAV satisfying a set of mission requirements.
- Stability and control analysis performed, along with a study of flight envelope, wind and gust effects, and spin recovery.
- Installation of a Satellite Communication On the Move (SOTM) explored, with the consideration of drag to optimize the SATCOM's wetted area.
- Deployment of parachute recovery system studied in detail, including material selection, size estimation and effectiveness.

AE203 Course Project: Conceptual design of n+3 generation turbofan engine — (November 2019 - December 2019)

Course supervisor: Dr. Pratikash Panda, IISc

- involved calculation and tabulation of air properties, enthalpy and entropy as a function of temperature (200K - 1000K)
- selected and evaluated performance of two different engines at SLTO.
- Off-design performance evaluated at cruise and idle-conditions.

OpenAI Taxi-V2 implementation in C++ — (April 2021 - May 2021)

- Implemented OpenAI Taxi-V2 from scratch in C++ with graphical environment powered by SFML (Simple and Fast Multimedia Library).
- Uses Q-learning (reinforcement learning) to arrive at the solution.
- added support for reward table generation and save states.