

VAJRA AND ODIN CRAWLER

A PROJECT REPORT

Submitted by,

Manur Yashas Sreevatsa - 20211CSE0275

Under the guidance of,

Dr. Anand Prakash

Associate Professor, School of Computer Science and Engineering

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At



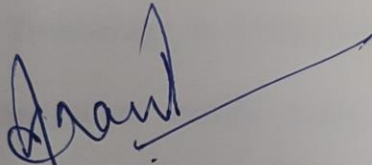
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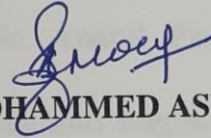
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CERTIFICATE

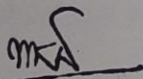
This is to certify that the Internship/Project report “VAJRA AND ODIN CRAWLER” being submitted by “MANUR YASHAS SREEVATSA” bearing roll number “20211CSE0275” in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.



Dr. ANAND PRAKASH
Associate Professor
PSCS / PSIS
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Dr. MOHAMMED ASIF
HoD
PSCS
Presidency University



Dr. MYDHILI NAIR
Associate Dean
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Dr. SAMEERUDDIN KHAN
Pro-Vice Chancellor - Engineering
Dean –PSCS / PSIS
Presidency University

PRESIDENCY UNIVERSITY

PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

DECLARATION

I hereby declare that the work, which is being presented in the report entitled “**VAJRA AND ODIN CRAWLER**” in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering**, is a record of my own investigations carried under the guidance of **Dr. Anand Prakash**, Associate Professor, **Prsidency School of Computer Science and Engineering, Presidency University, Bengaluru.**

I have not submitted the matter presented in this report anywhere for the award of any other Degree.

MANUR YASHAS SREEVATSA
20211CSE0275

INTERNSHIP COMPLETION CERTIFICATE

ASTRAEUS NEXT GEN PRIVATE LIMITED

CIN Number: U62099PN2024PTC233411

AVANEESH SNO 7/1 (P) 7/2 NR, KOKAN EXPRESS, KOTHRUD, PUNE- 411038

Ref No.

Date:21/05/2025

Recommendation Letter for Manur Yashas Sreevatsa

To Whom It May Concern,

I am pleased to write this recommendation letter for Manur Yashas Sreevatsa, who interned at Astraeus Next Gen Pvt. Ltd. from January 16th, 2025, to May 20th, 2025. During his time with us, Manur worked on two of our key technology platforms, Odin and Vajra, and consistently displayed a high level of professionalism, technical skill, and initiative.

Manur's primary responsibilities involved frontend development and API integration for both projects. His contributions included:

1. Building and refining responsive user interfaces for the Odin platform, which functions as an AI-powered intelligence engine for company and geopolitical data aggregation.
2. Developing dynamic frontend components and implementing seamless API integration to ensure real-time data exchange and operational fluidity.
3. Working on Vajra's traffic optimization dashboard for IXPs, assisting with the creation of a user-friendly interface and integrating data pipelines for real-time network visualization.
4. Collaborating closely with the backend and AI/ML teams to ensure all visual and data elements were aligned, optimized, and scalable.

Manur demonstrated excellent problem-solving skills and adaptability, delivering quality outputs on tight timelines. His attention to detail, proactive communication, and ability to work independently and in teams made him a valuable asset to our engineering team.

I am confident that Manur Yashas Sreevatsa will be a strong contributor in any future endeavour he undertakes and will bring value to any technical team or organization.

Please feel free to contact me at anushdhavale@astraeusnextgen.com for any further information.

Sincerely,



Anush Dhavale Chairman &
Co-Founder
Astraeus Next Gen Pvt. Ltd.

ABSTRACT

This report presents the work undertaken during my internship at **Astraeus Next Gen Pvt. Ltd.**, where I contributed as a **Full Stack Web Development Intern**. The internship involved the design and development of three innovative projects—**Vajra and Odin Crawler**—each addressing real-world challenges in networking, web crawling, and software debugging. **Vajra** is a network optimization and cybersecurity platform that intelligently reroutes internet traffic across Internet Exchange Points (IXPs) to reduce congestion and improve performance. It features a dynamic pricing model based on actual improvements in latency and data speed. **Odin Crawler** is a smart, subscription-based web crawling system that allows users to search for content using keywords and receive a curated list of relevant links. It offers a 3-day trial and restricts access post-trial using PayPal integration, enabling controlled and monetized crawling. Together, these projects reflect the practical application of full stack development skills and AI integration to build scalable, intelligent systems. This report outlines the objectives, methodologies, and problem-solving approaches adopted throughout the internship.