



# Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

Department : Industrial and Production Engineering				
Academic Year: 2021-22				
Sr. No.	Programme Code	Name of the Programme		
01.	ENT-PG-CA 0549	M. Tech. Industrial and Production Engineering		

# Following students have carried out their Project work/ Internship/ Field Project/Industrial Training for the academic session 2021-22

Si.No.	Name of the Students	Page No
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বিদ্যালয়েন্ত্র / Head প্রারীনিক পৌ তথ্যবেন প্রদির্যারিকী Industrial & Production Engineering প্রতিনিধিকী বাংখ্যান / Engineering & Technology ক্রমণীখনে বিধ্যাবিদ্যালয়, নিকামসুখ (চ.ম.) Guru Ghasidas Vishwavidyalaya, Bilasput (C.G.)

Signature and Seal of the Head



## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

#### CNN VISION-BASED NAVIGATION OF QUADROTORS

Of MASTER OF TECHNOLOGY

(CAD-CAM & ROBOTICS)

Dissertation Stage - I

Under the supervision of
Prof. Mukesh Kumar Singh
and
Co-supervision of
Dr. Ganesh P. Shukla



Submitted

By

Vikas Jangde

M.Tech (IIIrd Semester)

(Roll No.21034101)

Department of Industrial and Production Engineering School of Studies of Engineering and Technology Guru Ghasidas Vishwavidyalaya (Central University) Koni, Bilaspur, Chhattisgarh, INDIA

Pin- 495009

विभागाध्यक्ष/Head अतिमिक एवं उत्पादन अभियादिकी Industria & Finduction Engineering सीरोमिकी संस्थान (Engineering & Richhology का प्रशेशकर विश्वविद्यासम्, विस्तारवाहर (१९.स.) Guru Ghasidas Vishwavidyalaya, Bilaspur (С.G.) गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अधिनयम 2008 क्र. 25 के अंतर्गत स्वापित केन्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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## CANDIDATE'S DECLARATION

I hereby certify that the work which is being presented in the progress report entitled "CNN Vision-based Navigation of Quadrotor" by "Vikas Jangde" is in partial fulfillment for the award of the degree of M.Tech. (CAD/CAM- ROBOTOCS Robotics) submitted to the Department of Industrial and Production Engineering of Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, Chhattisgarh, India is an authentic record of my work carried out during the period from November 2022 to March 2023 under the supervision of Prof. Mukesh Kumar Singh and co-supervision of Dr. Ganesh Prasad Shukla. The matter presented in the progress report has not been submitted by me or anybody else in any other university /institute for the award of any degree/diploma.

This is to certify that the above statement made by the candidate is correct to the best of our knowledge.

Signature of the supervisor

PROF. MUKESH KUMAR SINGH

विभागाध्यक्ष/Head औरांगिक एवं उत्पादन अभियांत्रिकी Industrial & Production Engineering सैंटोगिकी संस्थान/Engineering & Technology क्राभीचल क्रियदिवास्त्य, विसासकुर (छ.व.) Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अधिनयम 2008 क्र. 25 के अंतर्गत स्वापित केन्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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## **CERTIFICATE**

As per the University Grant Commission (promotion of academic integrity and prevention of plagiarism in higher education institute) regulation 2023 dated 3<sup>rd</sup> March 2023 progress report CNN VISION BASED NAVIGATION OF QUADROTOR" of Vikas Jangde, a student of M.Tech (CAD/Cam-ROBOTICS) III semester has been checked by URKUND software available at Central Library, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, Chhattisgarh, India. The amount of similarity in the progress report 6%. The signed URKUND similarity report is attached to the certificate.

Signature of Student VIKAS JANGDE

Signature of the Supervisor

PROF. MUKESH KUMAR SINGH

Signature of the **Co-**Supervisor

DR. GANESH P. SHUKLA

বিদ্যালয়স্ত্রা / Head জীপ্রাণিক ংগ তথ্যেরন अभियांत्रिकी Industrial & Production Engineering শ্রীপ্রাণিকী নংখ্যান / Engineering & Technology হল তথ্যাপ্রথম কিথাইয়েনেয়, নিকাবস্থাং (জ.ন.) Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

Signature

Head

Department of Industrial and Production Engineering

Guru Ghasidas Vishwavidyalaya, Bilaspur