# Vinay Lanka

R&D Engineer – Robotics and IoT THIS IS! DMG GmbH

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Electronics and Communication Engineering undergraduate from VIT, Vellore

Robotics Software Engineer with competencies in Embedded Systems, IoT and Web Development.

Certified Robotics Software Engineer by Udacity.

## Experience

R&D Robotics and IoT Engineer – This IS DMG GmbH July 2021 – Present

Intern - Toshiba Machine (Chennai) Pvt. Ltd.

May - June 2019

Co-Founder - ReTag

Nov 2018 - Oct 2019

## Education

High School - Delhi Public School, Hyderabad. 2013-2017

Undergraduate - Vellore Institute of Technology, Vellore. 2017-2021 - CGPA - 8.83

# Personal Projects

#### **Robot Web Suite**

- Implementation of an industry ready robot controller that controls the any robot remotely through a web interface. Uses Movelt, roslibjs and ROS control.
- https://www.youtube.com/watch?v=37U62tWk-zE

## Autonomous Mobile Robot (YouTube Series)

- A fully autonomous robot designed from scratch and documented as a YouTube video series
- youtube.com/playlist?list=PLgIm6kGwO6a7AVhKQzmrjcVVicOnvtdyT

## Raspberry Pi based colour sorter using DoBot Magician

- A colour sorter based on Computer Vision and a robotic arm with an app to show statistics
- youtube.com/watch?v=BghCrTwkOt0&t=21s

#### Tnet

- Tnet is an end to end solution with a portal designed to help customers view their injection moulding machine data in an intuitive web interface.
- Uses MySQL, Node.js with Express and AngularJS. Part of my summer internship at Toshiba Machine, Chennai.
- github.com/vinay-lanka/tnet

# Pitch Shift algorithm using Phase Vocoder and Wavelet Transform algorithms

- github.com/vinay-lanka/Pitch-Shift-Algorithm

#### Arduino-CLI

- Merged feature contributions and bug fixes
- github.com/vinay-lanka/arduino-cli

## Skills

## **Technical Skills**

Robotics (ROS), Embedded Systems,
Computer Vision
Arduino, AVR, ARM, Raspberry Pi (SBCs)
NodeJS, Docker, Kubernetes
Programming Languages (C, C++, Java, Go,
Python)
Design – Figma, Adobe Photoshop, Adobe XD

## Management Skills

Publicity and Marketing, QA

# Organisations

## IEEE VIT Vellore Student Chapter

Board Member - Technical Lead August 2019 - September 2020 Becoming-I-Foundation NGO

## **Achievements**

Cofounder of ReTag - A funded start-up in retail security under the Technology Business Incubator, VIT

Winner and finalist in numerous hackathons Invited to take a session on Robotics in Orange school - Arani

Speaker in the Node.IO workshop in the college's technical fest – GraVITas
Helped organise IEEE Techloop Hack and other events held by IEEE VIT student chapter

# **Blogs and Tutorials**

## Medium - @vinaylanka

- Exploring Embedded A Primer
- Control any Robotic Arm with ROS
- Making a hyper-engineered water alarm solution

## YouTube - Vinay Lanka

- Autonomous Rover from scratch (ROS)
- Robot Web Suite