# Job Notification Form, IIT Delhi

### Company Overview

Name: The Hi-Tech Robotic Systemz Ltd

Website: . https://www.hitechroboticsystemz.com/

Company Type:

Other (Technology Company- Industrial)

Description:

The Hi-Tech Robotic Systemz is a bootstrapped robotics company, founded in 2004; focused on developing products for the next generation of mobility with state of the art autonomous, driver assistive technology & mobile robots for both people and material transportation The core focus areas are: -L0 to L5 Autonomy for Vehicles, which includes Software Stack for Autonomous Driving and Advance Driver Assistive Systems (ADAS) products for next generation of Vehicles. -Enabling Industry 4.0 with Autonomous Mobile Robots (AMRs) for warehousing, manufacturing facilities with a connected Industrial IoT framework.

### Job Details

Designation: Software Engineer Trainee

Core (Technical) Type:

Place

of Gurgaon

Posting:

Job Details: JOB DESCRIPTION

Company Name: The Hi-Tech Robotic Systemz Ltd.

Location: Gurgaon, India

Company Profile:

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Remuneration: Year Compensation Structure

Initial 6 months on Stipend of 50K pm and PO of 15LPA for B.Tech/M.Tech graduates

Vacancies: 03

Roles: Deployment /R&D/Fullstack Development-FMS Robotics

#### Ideal Profile:

- Masters/Bachelors in Electrical/Electronics/Computer Science or an equivalent Mathematics field + Machine Learning (AI) Background
- · Understanding of classical or modern controls
- · Understanding of traditional computer vision methods and OpenCV or other computer vision libraries and.
- Basic understanding with common Machine Learning methods
- Understanding of model predictive control, numerical optimization, or estimation theory

- Should be able to write C++ in a production environment
- Understanding of ROS/Autonomous Robots/Path Planning ,robotic and/or autonomous vehicle system design and implementation
- Knowledge of other front-end languages and libraries (HTML, CSS, JavaScript, jQuery) and back-end languages (C#, Python)
- · Knowledge with Linux

#### Competencies:

- Speed Orientation
- Adaptability and Flexibility
- Openness to work in Unstructured Environments
- Entrepreneurial Approach
- Execution Excellence
- · Analytical Ability
- Self-Driven/Enthusiastic

#### ROLE 1: Responsibilities (For AMR):

- Take algorithms from conception to implementation and deployment
- Implement fast reliable code (C, C++, Linux)
- Knowledge of Software Development Life Cycle (SDLC) & Agile Development
- Work with existing code base to optimize performance
- Knowledge and practical application of robotic path planning, motion planning and decision making algorithms (A\*, RRT, CC-RRT etc.)
- Innovate cutting-edge autonomous robots features
- Knowledge of vehicle modeling and dynamics, motion prediction, and kinematics
- Knowledge of control theory and applications
- Knowledge of localization algorithms (SLAM, probabilistic filters), vehicle state estimation, dead reckoning

#### ROLE 2 :Responsibilities (For CV/ML):

- Responsible for developing computer vision and machine learning based technologies for deployment on embedded processors in autonomous cars, and cloud based data analytics.
- Experiment with real-world data to validate, evaluate and improve the algorithms.
- Responsible for productizing the CV/ML algorithms into product features, with support and guidance from other system engineering teams.
- Profile the software stack, develop and run Performance tests, help minimize inefficiencies/latency and improve performance.
- Development in the modules for Autonomous Urban Navigation Stack and develop Integration tests to validate the various workflows.
- Setup and maintain 'Continuous Integration' for features and releases
- Coordinate the development with cross functional teams based out of multiple geographies.
- Designing, training and deploying neural networks for complex computer vision problems.
- Keeping up with recent AI research results and implementing/improving on winning DNN algorithms

#### ROLE 3: Responsibilities (For FMS Software Development –FSD role):

- Crafts Fleet Management System (FMS) for Mobile Robots
- Design client-side and server-side software architecture for FMS communication
- Work with development teams and product managers to ideate software solution
- Design and create scalable software as per requirements

- Drives and adapts different technologies to develop FMS system
- Writing clean, functional code on front- and back-end
- Testing and debugging or other coding issues
- Responsible for full software development life-cycle from conception to deployment

Joining By: 6 June 2022

### Salary Details

CTC: 1,509,250 INR Per Annum

Gross: 1,350,000 INR Per Annum

CTC Structure Mode of Claim Breakup: (Monthly/Annually)

Basic Salary 45,000.00 Monthly

HRA 18,000.00 Monthly

Special Allowance 41,250.00 Monthly Medical Allowance 1,250.00 Monthly Conv Allowance 1,600.00 Monthly

Sub Total (A) 1,07,100.00

Provident Fund 5,400.00 Employer monthly contribution @ 12% of basic

Sub Total (B) 5,400.00

Gross Salary (pm) (A+B) 1,12,500.00

Fixed Pay (pa) 13,50,000.00 Gross Salary x 12 (C x12)

Variable Pay (pa) 1,50,000.00 Paid based on target achievement (\*To be paid

Annually- based on individual and company's performance)

Bonus 9250.00 As per Payment of Bonus Act, 1965

Annual Gross Salary 15,09,250.00

## **Selection Process**

Resume Shortlist:

Written Test:

Yes

No

Online Test: No

Group No

Discussion:

Medical Test: No

Personal Yes Interview:

**No.** of 3

Rounds:

No. of 4

Offers:

Minimum 6 CGPA:

### Eligibility

Recruiting PHDs:

Yes

Eligible Departments:

B.Tech in Biochemical Engineering & Biotechnology, B.Tech in Chemical Engineering, B.Tech in Civil Engineering, B.Tech in Computer Science & Engineering, B.Tech in Electrical Engineering, B.Tech in Electrical Engineering (Power and Automation), B.Tech in Engineering Physics, B.Tech in Engineering and Computational Mechanics, B.Tech in Materials Engineering, B.Tech in Mathematics & Computing, B.Tech in Mechanical Engineering, B.Tech in Production & Industrial Engineering, B.Tech in Textile Engineering, B.Tech and M.Tech in Biochemical Engg & Biotechnology, B.Tech and M.Tech in Chemical Engineering, B.Tech and M.Tech in Computer Science & Engineering, B.Tech and M.Tech in Mathematics & Computing, M.Sc in Mathematics, B.Tech in Civil Engineering and M.Tech in Geotechnical and Geoenvironmental Engineering, B.Tech in Civil Engineering and M.Tech in Water Resources Engineering, B.Tech in Mechanical Engineering and M.Tech in Thermal Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Civil Engineering and M.Tech in Structural Engineering, B.Tech in Civil Engineering and M.Tech in Construction Engineering & Management, B.Tech in Textile Engineering and M.Tech in Computer Science & Engineering, B.Tech in Engineering Physics and M.Tech in Computer Science & Engineering, B.Tech in Chemical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Production & Industrial Engineering and M.Tech in Computer Science & Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Mechanical Engineering and M.Tech in Computer Science & Engineering, B.Tech in Production & Industrial Engineering and M.Tech in Production Engineering