VIETNAM NATIONAL UNIVERSITY, HCMC
HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING

REPORT
INTERNSHIP

SEMESTER 233 ACADEMIC YEAR 2023-2024

- **MAJOR**: COMPUTER ENGINEERING

- **PROGRAM**: STANDARD

- **INTERNSHIP COMPANY**: VIEROBOT COMPANY LIMITED

- **DIRECT SUPERVISOR AT THE COMPANY**: PHAM SON LOC

- **SUPERVISOR OF FACULTY**: MEng. HOANG LE HAI THANH

- **STUDENT**:
  FULLNAME: VO TRAN NHA LINH. **ID**: 2111654

HO CHI MINH CITY, 08/2024

Acknowledgments

My summer internship has come to an end, and I am filled with gratitude for the journey and the people who have been a part of it.

First and foremost, I want to epxress my sincere gratitude to Vierobot Company for providing an exciting and dynamic working environment. I am also profoundly thankful to Mr. Pham Son Loc for giving me the opportunity to work here. As my mentor, he offered invaluable feedback and guidance, shaping my engineering mindset. His insights and advice have been truly transformative. To me, he is not only a mentor but also a role model.

It would be a shame not to mention my colleagues. They are exceptionally professional, skilled, and talented engineers. Their unwavering support and feedback enriched my internship experience immeasurably.

Secondly, I extend my heartfelt gratitude to my university, Ho Chi Minh City University of Technology (VNU-HCM). Thank you for facilitating this internship opportunity, enabling me to work at Vierobot. I am also deeply grateful to MEng. Hoang Le Hai Thanh for being my advisor, offering guidance and support throughout this journey.

Last but certainly not least, I wish to express my deepest thankfulness to my family and friends. They are the most wonderful and supportive people in the world. Thank you for standing by me through every challenge and triumph.

Sincerely,

Linh.

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1 Background Information

1.1 Vierobot Company Limited

1.1.1 Basic information

Figure 1: Vierobot Logo

- **Company Name**: Vierobot Company Limited

- **Slogan**: Quality, Precision, and Reliability

- **Location**: 10/20, Street 30, Linh Dong Ward, Thu Duc City, HCMC

- **Industry**: Machinery Manufacturing

- **Website**: viercycle.com

The company provides IoT solutions, have their own eBike brand VierCycle and eBike service KUTKIT.
Because my main job at the company is developing devices of VierCycle, so I want to introduce more about it.

1.1.2 VierCycle

At VierCycle, people make high-quality eBike drive systems with high-tech integration and cloud-based software applications, and also provides comprehensive eBike solutions[1].

VierCycle offers a wide range of applications, from daily commutes, weekend rides to leisure activities while prioritizing safety, reliability and performance.

Figure 2: VierCycle eBike Systems. *Source: LinkedIn*

1.2   My position and responsibilities

At Vierobot, I am working as an Embedded System Intern.

I take part in developing the firmware of company's products. More specific, I have worked with communication protocols between parts of device system. As you can see at Figure 2, I contributed to the communication between Remote Display and Controller.

Beside that, I also lend a hand with other activities of the company like repairing devices, joining exhibition,...

My main responsibilities are:

- Researching, writing documents for new parts

- Implementing, developing features for devices

2 Internship Progress

2.1 Week 1

2.2 Week 2

2.3 Week 3

2.4 Week 4

2.5 Week 5

2.6 Week 6

2.7 Week 7

2.8 Week 8

3   Conclusions

3.1   Engineering Aspect

3.2   Social Aspect

References

[1] *VierCycle – VierCycle.* https://viercycle.com/viercycle/. [Accessed 08-07-2024].