

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



**REPORT**

**Internship**

**SEMESTER 233 ACADEMIC YEAR 2023-2024**

- MAJOR: COMPUTER SCIENCE**
- STUDY PROGRAM: BACHELOR OF ENGINEERING (COM-  
PUTER) (CLC)**
- INTERNSHIP COMPANY/BUSINESS:  
NUS TECHNOLOGY**
- INTERNSHIP SUPERVISOR:  
NGUYỄN MINH NHÂN**
- INTERNSHIP COORDINATOR:  
NGUYỄN HỮU HIẾU**
- STUDENT (SVTH):  
FULL NAME: NGUYỄN XUÂN THÀNH MSSV: 2152285**

Hồ Chí Minh City, 08/2024

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# 1 Internship Program

Chương trình "Web development with Ruby on Rails":

- o Các công nghệ phía front-end (Javascript, HTML, CSS, jQuery, Bootstrap, ...)
- o Ngôn ngữ Ruby và framework Ruby on Rails
- o Các "best practices" khi phát triển Web với Ruby on Rails
- o Các kiến thức về server và deployment (Linux, Heroku, Capistrano, ...)
- o Làm Final App dưới sự hướng dẫn của các senior developers

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Tuần	Nội dung công việc
1	Source version control (Git) + Client-side scripting
2	Client-side scripting + Toolbox RVM
3	Ruby + Getting Started with Rails + Rails Model
4	Rails Model
5	Rails Action Pack
6	Rails Action Pack + Unit Testing + Using Some Popular Rails Gems
7	Using Some Popular Rails Gems + Deployment to Heroku + Performances + Best Practices
8	Final app

## 2 Admission

NUS TECHNOLOGY

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM  
Độc lập – Tự do – Hạnh phúc  
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TP.HCM, ngày 28 tháng 05 năm 2024

**Kính gửi:** Khoa Khoa học và Kỹ thuật Máy Tính,  
Trường Đại học Bách Khoa - ĐHQG TP HCM

Sau thời gian nhận hồ sơ, phỏng vấn – xét tuyển sinh viên theo lộ trình triển khai chương trình Thực tập ngoài Trường/ Học kỳ 3 năm học 2023-2024 (TTNT/HK233) của Khoa, chúng tôi xin báo đến Khoa danh sách sinh viên trúng tuyển TTNT/HK233 tại NUS TECHNOLOGY như sau:

STT	Mã số sinh viên	Họ lót	Tên	Ghi chú
1	2111056	Nguyễn Minh	Điểm	
2	2110264	Võ Văn	Khả	
3	2114277	Từ Mai Thế	Nhân	
4	2112070	Ngô Văn	Phương	
5	2152285	Nguyễn Xuân	Thành	

Trân trọng kính chào!

**BAN LÃNH ĐẠO**  
(Ký, ghi rõ họ tên, chức vụ, đóng dấu)



Trưởng phòng Nhân sự  
**LÊ THỊ THANH THÚY**

## 3 Summary

### 3.1 Week 1

#### 3.1.1 Job Description

- Working with Git and version control.
- Practice front end development (HTML, CSS, JS and Bootstrap).
- Be introduced to final application as end product.

#### 3.1.2 Result

- Develop UI for final app.

### 3.2 Week 2

#### 3.2.1 Job Description

- Learn the Ruby programming language.
- Be introduced to the RVM toolbox.

### **3.2.2 Result**

- Program in Ruby.
- Setup workstation for continuous development.

## **3.3 Week 3**

### **3.3.1 Job Description**

- Learn the basic of Rails framework: Migrations, Validations, Callbacks and Associations.

### **3.3.2 Result**

- Use Rails for back end development.

## **3.4 Week 4**

### **3.4.1 Job Description**

- Learn Rails Model and Controller.

### **3.4.2 Result**

- Develop Rails app under MVC architecture.

## **3.5 Week 5**

### **3.5.1 Job Description**

- Learn how Rails render web page.
- Study Rails Internationalization API and Mailer.

### **3.5.2 Result**

- Finish the basic of one Rails app.

## **3.6 Week 6**

### **3.6.1 Job Description**

- Study some popular Ruby Gems: Devise, Carrierwave,...
- Deployment

### **3.6.2 Result**

- Integrate additional features and deploy final app using third party service.

## **3.7 Week 7**

### **3.7.1 Job Description**

- Final app evaluation.
- Receive feedback from trainer.

### **3.7.2 Result**

- Finish end product of internship program.

## 4 Conclusion

Through the Ruby on Rails internship program at NUS Technology, I gained comprehensive knowledge of the Ruby programming language and Rails framework, along with practical experience in developing web applications under the MVC architecture. This experience equipped me with proficiency in writing efficient Ruby code, leveraging Rails' conventions to streamline development processes, and understanding the roles of models, views, and controllers in structuring applications. Working on the replica of a real-world project, from database design to deployment has enhanced my problem-solving abilities and reinforced best practices in software development. Overall, the program provided a solid foundation for building scalable and maintainable web applications, marking a pivotal leverage in my web development skill.

I am deeply grateful to NUS Technology for providing me the opportunity to be a part of it. I appreciate how the company fosters an energetic and refreshing culture that encourages innovation and collaboration. The enthusiasm and passion exhibited by my colleagues and trainers have inspired me to push the boundaries of my learning and contribute meaningfully to the end product. The positive atmosphere and openness to new ideas have not only enhanced my technical skills but also nurtured a sense of belonging and personal growth. I look forward to continuing to learn and thrive in such a dynamic workplace.

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Signature