# Thong Hoang Trinh

Hardware Design Engineer

# Objectives

- Seeking opportunity to utilize academic knowledge in physics and hardware design at Renesas Design Vietnam.
- Eager to apply skills in PCB layout, circuit simulation, and prototyping to contribute to projects.
- Motivated to learn from experienced engineers and become proficient in industry tools and processes.
- Aiming to develop communication and teamwork abilities in a professional environment and gain valuable experience in embedded systems at a leading company like Renesas.

#### Education

- 2023 Bachelor, PHYSICS AND ENGINEERING PHYSICS, VNUHCM UNIVERSITY OF SCIENCE, Ho Chi Minh City.
  - o GPA: 7.5/10, Thesis: 9.5/10, Rank: 2nd in class
- 2017 Intermediate professional, NETWORK AND SYSTEM ADMINIS-TRATION/ADMINISTRATOR, Information and Mass Communication Institute of Ho Chi Minh City (IMC).

#### Technical Skills

Programming language: R, C++, SQL.

Software: Proteus Design Suite, VMware, Matlab, Excel, R Studio, Originlab, Tableau.

Operating system: Windows server, Linux CentOS, Ubuntu.

#### **PROJECTS**

- 2023 Effect of the growth sector boundary on the structure and characteristics of KDP crystals grown from crystal violet and EDTA added mother solution.
  - , Demonstrate the optimal CV(Crystal Violet) concentration for enhancing the second harmonic generation (SHG) performance in KDP crystals.

- , The development process of the KCVE (0.001 mol%) single crystal rod is simulated using Matlab.
- , The KCVE samples are analyzed by EDX spectra, XRD analysis, and measurements such as UV-Vis spectra, PL spectra, and second harmonic generation (SHG) effects.

#### 2022 ZnO thin film coating.

- , Using sputtering, sol-gel dip coating method to coat material..
- , Applied XRD, EDX and UV-Vis to analyze the properties of each method.

#### 2022 Student attendance program.

- , Matlab project that apply knowledge learned throughout the Matlab programming subject in my University.
- , Import files from excel to find the right data in both ID number and name then import back the new data to excel sheets.

### Certifications

- 2017 TOEIC 600. ETS
- 2020 Learning How to Learn: Powerful mental tools to help you master tough subjects. Coursera
- 2022 Ask Questions to make Data-Driven Decisions. Coursera
- 2023 Data Analysis with R Programming. Coursera
- 2023 Google Data Analytics Certificates. Coursera

## Experience

- 12/2022 **Teacher**, Edupia Tutor , Utilized technology to enhance instruction, increase student engagement, and provide real-world learning experiences.
  - 2023 Effect of the growth sector boundary on the structure and characteristics of KDP crystals grown from crystal violet and EDTA added mother solution, Demonstrate the optimal CV(Crystal Violet) concentration for enhancing the second harmonic generation (SHG) performance in KDP crystals, https://github.com/TomALtR/my\_thesis\_matlab.

- 2023 Effect of the growth sector boundary on the structure and characteristics of KDP crystals grown from crystal violet and EDTA added mother solution, The development process of the KCVE (0.001 mol%) single crystal rod is simulated using Matlab, https://github.com/TomALtR/my\_thesis\_matlab.
- 2023 Effect of the growth sector boundary on the structure and characteristics of KDP crystals grown from crystal violet and EDTA added mother solution, The KCVE samples are analyze by EDX spectra, https://github.com/TomALtR/my\_thesis\_matlab.
- 2023 **Effect** of  $\mathbf{the}$ growth sector boundary on the structure and characteristics **KDP** of crystals grown from crystal violet EDTA XRDand added mother solution, analysis, https://github.com/TomALtR/my\_thesis\_matlab.
- 2023 Effect of the growth sector boundary on the structure and characteristics of KDP crystals grown from crystal violet and EDTA added mother solution, and measurements such as UV-Vis spectra, https://github.com/TomALtR/my\_thesis\_matlab.
- 2023 **Effect** of the growth sector boundary on the structure **KDP**  $\mathbf{of}$ and characteristics crystals grown from  $\mathbf{violet}$ and  $\mathbf{EDTA}$ added  $\mathbf{mother}$ solution, PLspectra, https://github.com/TomALtR/my\_thesis\_matlab.
- 2023 Effect of the growth sector boundary on the structure and characteristics of KDP crystals grown from crystal violet and EDTA added mother solution, and second harmonic generation (SHG) effects., https://github.com/TomALtR/my thesis matlab.
- 2023 ZnO thin film coating, Using sputtering.
- 2023 **ZnO thin film coating**, sol-gel dip coating method to coat material.
- 2023 **ZnO** thin film coating, Applied XRD.
- 2023 **ZnO thin film coating**, *EDX* and *UV-Vis* to analyze the properties of each method..
- 2023 **Student attendance program**, Matlab project that apply what I have learn through out the matlab programing subject in my University, https://github.com/TomALtR/my\_thesis\_matlab.

2023 Student attendance program, Import files from excel to find the right data in both ID number and name then import back the new data to excel sheets., https://github.com/TomALtR/my\_thesis\_matlab.