


# PATTHADON RACKSAWONGSAKUL

## Software Engineering Student & Developer

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 064-172-4493

 Lat Krabang, Bangkok, Thailand

 42 Bangkok Level 5.11

## PROFESSIONAL PROFILE

Dedicated software engineering student at 42 Bangkok with proven experience in C, Python, and web technologies. Currently at Level 5.11 in the prestigious 42 curriculum (57% Common Core completion), demonstrating strong problem-solving abilities and commitment to excellence. Experienced in tutoring programming concepts and developing practical applications including OCR systems and database management. Passionate about algorithm design, system programming, and creating efficient solutions to complex technical challenges.

## TECHNICAL SKILLS

### Programming Languages

C (Advanced), Python, C++, JavaScript, HTML/CSS, Lua Script, Scratch

### Technologies & Tools

MongoDB, OCR, Git, Unix/Linux, TCP/UDP Sockets, Multithreading

### Core Competencies

Algorithm Design, Data Structures, System Programming, Graphics Programming, Network Administration

### Languages

English (Proficient), Thai (Native)

## EDUCATION

### 42 Bangkok - Programming School

August 2023 - Present

**Level 5.11** Common Core Progress: 57% Complete

- Intensive peer-to-peer learning program focusing on practical software engineering
- Completed 18+ major projects including advanced C/C++, graphics, and system programming
- Specialized in algorithms, concurrent programming, and network systems

### Silpakorn University

### Bachelor of Electrical Engineering & Computer Systems

2020 - 2023

- Strong foundation in engineering principles and mathematical problem-solving
- Computer systems architecture and analytical thinking development

## PROFESSIONAL EXPERIENCE

### Programming Tutor

#### 42 Bangkok

November 2023 - Present

- Guide students through C programming fundamentals and advanced concepts
- Deliver technical presentations on programming best practices
- Mentor international students in peer-to-peer learning environment
- Foster connections and facilitate educational institution management

### Data Analyst & Programmer

#### Wetrust GPS Company

December 2022 - February 2023

- Developed OCR project utilizing Python and JavaScript for text extraction
- Implemented MongoDB database integration for efficient data storage
- Conducted comprehensive database administration and data analysis
- Provided technical consultation to company leadership

### Discovery Piscine Tutor

#### 42 Bangkok

September - October 2023

- Tutored junior high school students in HTML, CSS, and JavaScript
- Collaborated on practical, real-world web development projects
- Enhanced students' social engagement and teamwork skills

## KEY PROJECT ACHIEVEMENTS

### cub3d

280 Hours | Completed April 2025

Built a 3D ray-casting game engine inspired by classic FPS games, demonstrating advanced graphics programming and algorithm optimization. Passed with bonus.

### minishell

210 Hours | Completed January 2025

Developed a complete Unix shell implementation with process management, pipe handling, and built-in commands. Advanced system programming project.

### Philosophers

70 Hours | Completed February 2025

Implemented concurrent programming solution addressing the dining philosophers problem with multithreading and synchronization.

### C++ Modules (00-04)

70 Hours | April-May 2025

Mastered object-oriented programming concepts including inheritance, polymorphism, templates, and orthodox canonical classes in C++.

OCR Data Processing System

Professional Project | 2023

Created production-ready system for automated text extraction and database integration using Python, JavaScript, and MongoDB at Wetrust GPS Company.

Additional Projects

Various Durations

fract-ol (fractals graphics), push\_swap (sorting algorithms), pipex (Unix pipes), NetPractice (networking), and multiple system programming projects.

PROFESSIONAL COMPETENCIES

**Technical Leadership:** Proven ability to mentor and guide fellow programmers through complex technical concepts and project implementations.

**Problem-Solving:** Demonstrated expertise in algorithm design, data structure optimization, and systematic approach to debugging complex systems.