กิตติพศ ศิริวงศ์รังสรร

Curriculum Vitae

Medical Doctor & R developer

Employments

Radiology Resident

2565–Now **แพทย์ประจำบ้าน**, *ภาควิชารังสีวิทยา สาขาวิชารังสีวิทยาวินิจฉัย คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล*

Internist

2563–2565 **แพทย์ใช้ทุน**, *ภาควิชาสรีรวิทยา คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล*

2562–2563 **แพทย์เพิ่มพูนทักษะ**, *โรงพยาบาลพระนั่งเกล้า, จังหวัดนนทบุรี*

Educations

2556–2561 **หลักสูตรแพทยศาสตรบัณฑิต**, *คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล*
เกียรตินิยมอันดับ 2

2553–2555 **มัธยมศึกษาตอนปลาย**, *โรงเรียนเตรียมอุดมศึกษา*

Languages

Thai	Proficient	*Native Thai Speaker*
English	Good User	*IELTS Academic test = 7*

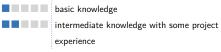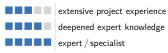## Interests

Data Science — I generally interested in all areas of data science including data analysis, data visualization, statistics, and machine learning.

Coding — I like the concept of writing code to make life better, even simple project can automate tasks and be a prototype to scale up further. My first and primary language is R. I've used R in many areas of data science from performing data analysis, data visualization, and statistics to building reproducible reports, web application, and more.

Computer Skills

Legend		Legend	
■□□□□	basic knowledge	■■■□□	extensive project experience
■■□□□	intermediate knowledge with some project experience	■■■■□	deepened expert knowledge
		■■■■■	expert / specialist

	Level	Skill	Years	Comment
Languages:	■■■■□	R	2	*R is my primary language. I enjoy my free time as an R developer (building R packages and Shiny applications) and perform data analysis using R.*
	■■□□□	Python	1	*Python is very popular in data science which I would like to learn more to complement my R skill.*
	■□□□□	Julia	1	*Julia is a high-performance scientific computing language. I've learned some basic of Julia and might take a deeper dive in the future.*
	■□□□□	JavaScript	1	*I sometimes use JS to write Google Apps Script.*
	■■□□□	HTML/CSS	2	*I've known some basic to build simple HTML document or style simple web page.*
Literate Programming:	■■■■□	Quarto	1	*An open-source scientific and technical publishing system. I recently use Quarto a lot to making reports, books, and blog posts.*
	■■■■□	R Markdown	2	*A dynamic documents that combine code, rendered output, and prose using R. I've used a lot before Quarto was born.*
	■■□□□	LaTeX	1	*A high-quality typesetting system for PDF. This CV was made using LaTeX!*
R Packages:	■■■■□	Tidyverse	2	*A collection of R packages for data science. I like to `tidyverse` for data import, transformation, and plotting.*
	■■□□□	Tidymodels	1	*A collection of packages for modeling and machine learning using tidyverse principles. I'm interested to learn more `tidymodels` tools in the future.*
	■■■□□	Shiny	2	*A data science web application framework in R. I've build quite a lot of Shiny app and would like to expand my skill on UI development and making production-grade app.*
CLI:	■■□□□	Git	2	*I manage my project with Git and Github.*
	■■□□□	Linux Shell	2	*I use Zsh.*
Software:	■■■■□	RStudio	2	*It's my favorite IDE for R.*
	■■■□□	VS code	1	*It's my text editor of choice for general usage.*
	■■□□□	Jupyter Notebook	1	*I sometime use for writing Python.*
Office Tools:	■■■■□	Google Sheets	2	*It is a very flexible spreadsheet tool with lots of formulas.*

| ■■■□□□ | Microsoft Excel | 1 | *I have to use Excel sometimes as well.* |

R Package Projects

General

- **thaipdf:** R Markdown to PDF in Thai language (CRAN) [1].

Education

- **moodleStats:** Perform quiz analysis and item analysis on Moodle Grades Report [2].
- **moodleQuiz:** Combine and manipulate Moodle Quiz Report for grading [3].
- **zoomclass:** Analyze Zoom's participants report and chat file [4].

Research

- **labChartHRV:** Import and manipulate LabChart's Heart Rate Variability Data [5].

Web Application Projects

- **TIRADS Calculator:** A Calculator for Thyroid Imaging Reporting & Data System [6].
- **SELECx MCQ Analysis:** Analyze quizzes and questions from SELECx [7].
- **SELECx Combine Quiz:** Combine quiz reports from SELECx [8].
- **Combine HRV & BRS report files:** Combine LabChart's HRV Report files to Excel [9].

Training

Academic training

- **Data Analysis with R Programming by Google** (Coursera) — Certificate
- **Statistical Learning by StanfordOnline** (Coursera) — Certificate
- **Advanced R Programming by Johns Hopkins University** (Coursera) — Certificate
- **Cell and molecular biology course for postgraduate students** (Mahidol university)

Other training

- **การพัฒนาข้อสอบปรนัยเพื่อประเมินความรู้ทางการแพทย์** (SHEE) — Certificate
- **การทำสไลด์นำเสนออย่างมืออาชีพ** (SHEE) — Certificate

Teaching

2564 - 2565   **Respiratory physiology** (SIET216)
Cardiovascular physiology (SIET216)
Nervous System 1 (PNS) (SIET216)

Presentations

At the department of physiology (2564–2565)

- นำเสนอ โครงการวิจัย-นวัตกรรม ในหัวข้อ **"R Journey in Physiology Department"** — Slide
- นำเสนอ โครงการวิจัย-นวัตกรรม ในหัวข้อ **"Web application วิเคราะห์คะแนนนักศึกษาจากระบบ SELECx"** — SELECx MCQ Analysis [7]
- นำเสนอ Scientific articles ใน Journal clubs ในหัวข้อ **"Heart rate variability analysis and cardiac dysautonomia in ischemic stroke patients"**
- นำเสนอ Scientific articles ใน Journal clubs ในหัวข้อ **"RSA in the immediate post-exercise period: correlation with breathing-specific heart rate"**

Other Experiences

At the department of physiology (2564–2565)

o สร้างและออกแบบ **ระบบการติดตามภาระงานแพทย์ใช้ทุน** ด้วย Google Sheets และ R package: `googlesheets4` และ `googledrive`

o ปฏิบัติงานช่วยเหลือแพทย์ประจำบ้านใน ward ผู้ป่วย COVID-19 ที่ ตึกอัษฎางค์ คณะแพทยศาสตร์ศิริราชพยาบาล ในระหว่างวันที่ 28/ก.ค./64 - 4/ส.ค./64

References

[1] Kittipos Sirivongrungson. *thaipdf: R Markdown to PDF in Thai Language*, 2022. R package, https://CRAN.R-project.org/package=thaipdf.

[2] Kittipos Sirivongrungson. *moodleStats: A High-level R Package for Analysis of Moodle Grades Report*, 2022. R package, https://lightbridge-ks.github.io/moodleStats/.

[3] Kittipos Sirivongrungson. *moodleQuiz: A High-level R Package for Manipulation of Moodle Quiz Report*, 2022. R package, https://lightbridge-ks.github.io/moodleQuiz/.

[4] Kittipos Sirivongrungson. *zoomclass: Zoom Class*, 2022. R package, https://lightbridge-ks.github.io/zoomclass.

[5] Kittipos Sirivongrungson. *labChartHRV: LabChart's HRV Data Import and Manipulation*, 2022. R package, https://lightbridge-ks.github.io/labChartHRV/.

[6] Kittipos Sirivongrungson. *A Calculator for Thyroid Imaging Reporting and Data System*, 2022. Shiny web application https://kittipos.shinyapps.io/tirads-calc/.

[7] Kittipos Sirivongrungson. *SELECx MCQ Analysis: Analysis of Quizzes and Questions from SELECx*, 2021. Shiny web application https://si-physio-intern.shinyapps.io/SELECx_mcq_analysis/.

[8] Kittipos Sirivongrungson. *SELECx Combine Quiz: Combine Quiz Reports from SELECx*, 2021. Shiny web application https://si-physio-intern.shinyapps.io/SELECx_combine_quiz/.

[9] Kittipos Sirivongrungson. *Combine HRV and BRS report file: Combine HRV and BRS report from program LabChart and BeatScope Easy*, 2021. Shiny web application https://sips-ans.shinyapps.io/read_HRV_report/.