# กิตติพศ ศิริวงศ์รังสรร

# Curriculum Vitae

#### Medical Doctor & R developer

# **Employments**

#### Radiology Resident

แพทย์ประจำบ้าน, ภาควิชารังสีวิทยา สาขาวิชารังสีวิทยาวินิจฉัย คณะแพทยศาสตร์โรงพยาบาล 2565-Now รามาธิบดี มหาวิทยาลัยมหิดล

#### Internist

2563–2565 แพทย์ใช้ทุน, ภาควิชาสรีรวิทยา คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล

2562-2563 แพทย์เพิ่มพูนทักษะ, โรงพยาบาลพระนั่งเกล้า, จังหวัดนนทบุรี

#### Educations

2556-2561 หลักสูตรแพทยศาสตรบัณฑิต, คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล เกียรติ้นิยมอันดับ 2

2553-2555 มัธยมศึกษาตอนปลาย, โรงเรียนเตรียมอุดมศึกษา

# Languages

Thai Proficient Native Thai Speaker IELTS Academic test = 7

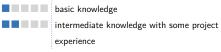
English Good User

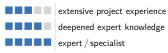
#### Interests

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





	or periodice			expect/ 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.	
		<u> P</u> TEX	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.	

# R Package Projects

#### General

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

#### Education

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

#### Research

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

### Web Application Projects

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

# Blog

I also like to write online content. You are welcome to visit my personal blog.

# **Training**

#### Academic training

- o 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

- o การพัฒนาข้อสอบปรนัยเพื่อประเมินความรู้ทางการแพทย์ (SHEE) Certificate
- o 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)

- o นำเสนอ โครงการวิจัย-นวัตกรรม ในหัวข้อ "R Journey in Physiology Department" Slide
- บำเสนอ โครงการวิจัย-นวัตกรรม ในหัวข้อ "Web application วิเคราะห์คะแนนนักศึกษาจาก ระบบ SELECx" SELECx MCQ Analysis [7]
- o นำเสนอ Scientific articles ใน Journal clubs ในหัวข้อ "Heart rate variability analysis and cardiac dysautonomia in ischemic stroke patients"

o 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
- ปฏิบัติงานช่วยเหลือแพทย์ประจำบ้านใน ward ผู้ป่วย COVID-19 ที่ ตึกอัษฎางค์ คณะแพทยศาสตร์
  ศิริราชพยาบาล 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/.