

1.	i. Full Name: JACKEL CHEW VUI LUNG jackelchew93@ums.edu.my	
ii. Academic Qualifications:		
Qualification (Field)	Name of Awarding Institution and Country	Year Awarded
PhD in Mathematics	Universiti Malaysia Sabah, Malaysia	2017 - 2019
MPhil in Mathematics	Universiti Malaysia Sabah, Malaysia	2015 - 2017
BSc in Mathematics with Economics	Universiti Malaysia Sabah, Malaysia	2012 - 2015
Foundation in Science	Universiti Malaysia Sabah, Malaysia	2011 - 2012
iii. Current Professional Membership:		
Society for Industrial and Applied Mathematics (SIAM) Outreach Membership (020917796)		
International Association of Engineers (IAENG) Membership (291753)		
iv. Current Teaching and Administrative Responsibilities:		
<ul style="list-style-type: none"> Teaching 		
Programme	Subjects Taught	
E-Commerce Business Computing	<ul style="list-style-type: none"> Basic Mathematics Discrete Mathematics Statistics 	
<ul style="list-style-type: none"> Administrative Quacquarelli Symonds Subject Ranking Faculty Task Force Member (2020-2021), Malaysia Research Assessment Faculty Task Force Member (2019-2021) Students' Activities and Alumni Coordinator (2020-2022) Students' Mentor and Final Year Project Supervisor (2020-2021) 		
v. Previous Employment:		
Name of Employer	Position Held	Start and End Date
Universiti Malaysia Sabah	Senior Lecturer	June 2019 - Now
Universiti Malaysia Sabah	Tutor	October 2015 - April 2019
Institute for Development Studies (Sabah)	Intern	July 2015 - September 2015
vi. Conference and Training (past 3 years only, inclusive of current year):		
Date	Conference / Training Attended	
28-29 August 2021	The 8th International Conference on Computational Science and Technology	
17 August 2021	The 1st UMS Colloquium on Fundamental Research and Application	
22 July 2021	Scopus Content Curation - Southeast Asia	
27-28 March 2021	The 5th International Middle East Conference on Contemporary Scientific Studies	

24-25 December 2020	The 9th International Conference on Computer Engineering & Mathematical Sciences
1 October 2020	NEM Online Train-the-Trainers (TTT) Programme
vii. Research and Publications:	
<ul style="list-style-type: none"> • Current Research Grant; <ul style="list-style-type: none"> • (PI) SBK0462-2021 Numerical Solution of Two-Dimensional Nonlinear Partial Differential Equations of Porous Medium Type by Finite Difference Schemes and Successive Over Relaxation Iterative Methods • (PI) SGA0061-2019 Numerical Solution of One-Dimensional Nonlinear Porous Medium Equation using Newton-EGSOR iterative methods 	
<ul style="list-style-type: none"> • Journals <ul style="list-style-type: none"> • Aruchunan, E., Chew, J. V. L., Muthuvalu, M.S., Sunarto, A., & Sulaiman, J. (2021). A Newton-Modified Weighted Arithmetic Mean Solution of Nonlinear Porous Medium Type Equations. <i>Symmetry</i>, 13(8), 1511. (CiteScore 3.4, Q2 Scopus) • Sunarto, A., Agarwal, P., Sulaiman, J., Chew, J.V.L., & Momani, S. (2021). Quarter-Sweep Preconditioned Relaxation Method, Algorithm and Efficiency Analysis for Fractional Mathematical Equation. <i>Fractal and Fractional</i>, 5(3): 98. (CiteScore 3.6, Q2 Scopus) • Chew, J. V. L., Sulaiman, J., & Muhiddin, F. A. (2021). Numerical evaluation on the solution of the porous medium equation by 4-Point Newton-Explicit Group. <i>International Journal of Mathematics and Computer Science</i>, 16(4), 1487-1496. (CiteScore 0.7, Q2 Scopus) • Sunarto, A., Agarwal, P., Chew, J. V. L., & Sulaiman, J. (2021). Approximation Solution of the Fractional Parabolic Partial Differential Equation by the Half-Sweep and Preconditioned Relaxation. <i>Symmetry</i>, 2021(13), 1005. (CiteScore 3.4, Q2 Scopus) • Sunarto, A., Sulaiman, J., & Lung, J. C. V. (2021). Numerical Solution of The Time-Fractional Diffusion Equations Via Quarter-Sweep Preconditioned Gauss-Seidel Method. <i>International Journal of Applied Mathematics 2021</i>, 34(1), 111-125. (CiteScore 0.8, Q3 Scopus) • Chew, J. V. L., Sulaiman, J., & Sunarto, A. (2021). Solving One-Dimensional Porous Medium Equation Using Unconditionally Stable Half-Sweep Finite Difference and SOR Method. <i>Mathematics and Statistics</i>, 9(2), 166-171. (CiteScore 0.3, Q4 Scopus) • Sunarto, A., Agarwal, P., Sulaiman, J., Chew, J. V. L., & Aruchunan, E. (2021). Iterative method for solving one-dimensional fractional mathematical physics model via quarter-sweep and PAOR. <i>Advances in Difference Equations</i>, 2021(1), Article No. 147. (CiteScore 4.2, Q2 Scopus) • Lung, J. C. V., & Sulaiman, J. (2020). On Quarter-Sweep Finite Difference Scheme for One-Dimensional Porous Medium Equations. <i>International Journal of Applied Mathematics</i>, 33(3), 439-450. (CiteScore 0.8, Q3 Scopus) • Chew, J. V. L., & Sulaiman, J. (2018). Application of Newton and MSOR methods for solving 2D porous medium equations. <i>Far East Journal of Mathematical Sciences</i>, 108(1), 1-12. • Chew, J. V. L., & Sulaiman, J. (2018). Implicit finite difference solution of one-dimensional porous medium equations using Half-Sweep Newton-Explicit Group iterative method. <i>Journal of Engineering and Applied Sciences</i>, 13, 1286-1290. • Chew, J. V. L., & Sulaiman, J. (2018). Solution of One-Dimensional Porous Medium Equation Using Half-Sweep Newton-MSOR Iteration. <i>Advanced Science Letters</i>, 24(3), 1906-1911. • Chew, J. V. L., & Sulaiman, J. (2017). Newton-SOR iterative method for solving the two-dimensional porous medium equation. <i>Journal of Fundamental and Applied Sciences</i>, 9(6S), 384-394. • Justine, H., Chew, J.V.L., & Sulaiman, J. (2017). Quartic non-polynomial spline solution for solving two-point boundary value problems by using Conjugate Gradient Iterative Method. <i>Journal of Applied Mathematics and Computational Mechanics</i>, 16(1), 41-50. • Chew, J. V. L., & Sulaiman, J. (2016). Implicit solution of 1D nonlinear porous medium equation using the four-point Newton-EGMSOR iterative method. <i>Journal of Applied Mathematics and Computational Mechanics</i>, 15(2), 11-21. • Chew, J. V. L., & Sulaiman, J. (2016). Half-Sweep Newton-Gauss-Seidel for implicit finite difference solution of 1D nonlinear porous medium equations. <i>Global Journal of Pure and Applied Mathematics</i>, 12(3), 2745-2752. 	

- Book Chapters

- Nasirin, S., Seman, E. A. A., Ismail, H., Bahar, I. A. A., **Lung, J. C. V.**, Tuah, N. M., ... Lada, S. (2021). The Present State of System Analysis and Design in East Malaysia. Trends and Applications in Information Systems and Technologies, 314-318.

- Proceedings International Conferences

- A. Sunarto, P. Agarwal, **J.V.L. Chew**, H. Justine, & J. Sulaiman. (2021). QSSOR and cubic non-polynomial spline method for the solution of two-point boundary value problems. Journal of Physics: Conference Series 2000(1), Article No. 012007. International Conference on Innovative Technology and Sciences IC.ITSS 2020. Kuantan, Pahang, Malaysia. 12-13 November 2020.
- A. Sunarto, J. Sulaiman, & **J.V.L. Chew**. (2021). Performance of FSPAOR iteration for solving one-dimensional space-fractional diffusion equation. Journal of Physics: Conference Series 1803(1), Article No. 012004. 2nd International Conference on Enhanced research and Industrial Application 2020. Yogyakarta, Indonesia. 8-9 October 2020.
- **J. C. V. Lung**, J. Sulaiman, & A. Sunarto. (2021). The application of successive overrelaxation method for the solution of linearized half-sweep finite difference approximation to two-dimensional porous medium equation. IOP Conference Series: Materials Science and Engineering 1088(1), Article No. 012002. Annual Conference on Computer Science and Engineering Technology 2020. Medan, Indonesia. 23 September 2020.
- **J. V. L. Chew** & J. Sulaiman. An unconditionally stable implicit difference scheme for 2D porous medium equations using four-point NEGMSOR iterative method. ITM Web Conference 20, Article No. 02004. International Conference on Mathematics 2018: Recent Advances in Algebra, Numerical Analysis, Applied Analysis and Statistics. Ho Chi Minh City, Vietnam. 18-20 December 2018.
- **J. V. L. Chew** & J. Sulaiman. Application of four-point Newton-EGSOR iteration for the numerical solution of 2D porous medium equations. Journal of Physics: Conference Series 890(1), Article No. 012075. 1st International Conference on Applied & Industrial Mathematics and Statistics. Kuantan, Pahang, Malaysia. 8-10 August 2017.
- **J. V. L. Chew** & J. Sulaiman. Newton-SOR iterative method for solving the two-dimensional porous medium equation. Research in Applied Sciences and Knowledge Engineering International Conference 2017. Tapah, Perak, Malaysia. 8-9 May 2017.
- **J. V. L. Chew** & J. Sulaiman. Implicit finite difference solution of 1D nonlinear porous medium equation via four-point EGSOR with Newton iteration. Global Journal of Engineering and Technology Review 1(1), 9-16. Global Conference on Engineering and Technology 2016. Kuala Lumpur, Malaysia. 1-2 June 2016.
- **J. V. L. Chew** & J. Sulaiman. (2016). Application of MSOR iteration with Newton scheme for solutions of 1D nonlinear porous medium equations. AIP Conference Proceedings 1739, Article No. 020017. 2nd International Conference on Mathematical Sciences and Statistics 2016. Kuala Lumpur, Malaysia. 26-28 January 2016.

- Presenter

- The 8th International Conference on Computational Science and Technology 2021. Virtual Conference. 28-29 August 2021
- The 1st UMS Colloquium on Fundamental Research and Application 2020. Virtual Conference. 17 August 2021
- The 5th International Middle East Conference on Contemporary Scientific Studies 2020. Virtual Conference. 27-28 March 2021
- The 9th International Conference on Computer Engineering & Mathematical Sciences 2020. Virtual Conference. 24-25 December 2020
- The 1st International Conference on Applied & Industrial Mathematics and Statistics 2017. Kuantan, Pahang, Malaysia. 8-10 August 2017.
- Research in Applied Sciences and Knowledge Engineering International Conference 2017. Tapah, Perak, Malaysia. 8-9 May 2017.
- Global Conference on Engineering and Technology 2016. Kuala Lumpur, Malaysia. 1-2 June 2016.
- The 2nd International Conference on Mathematical Sciences and Statistics 2016. Kuala Lumpur, Malaysia. 26-28 January 2016.

- Reviewer
 - Paper Reviewer for the 6th International Conference on Computer Science and Computational Intelligence (ICCS CI), August 2021
 - Paper Reviewer for Mechanics of Advanced Materials and Structures, July 2021.
 - Paper Reviewer for Advances in Science, Technology and Engineering Systems Journal, April 2021.
 - Paper Reviewer for the 9th International Conference on Computer Engineering & Mathematical Sciences, December 2020.

viii. **Consultancy:** N/A

ix. **Community Service** (past 3 years only, inclusive of current year):

- Academic Supervisor - E-Community: Facebook Page & Marketplace Workshop 2019, Kampung Sungai Bedaun, Labuan FT, Malaysia

x. **Other Relevant Information:**

- Society Clubs, Co-Curriculum activities and Committee involvement
 - Visual Analytics Research Group - Current