Profile Image

PROF. MADYA DR. ROSE IRNAWATY BINTI IBRAHIM

PENSYARAH UNIVERSITI DS14

CONTACT

PHONE

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E-MAIL

rose.irnawaty@usim.edu.my

FACULTY

Fakulti Sains Dan Teknologi

SUPERVISION

	COMPLETED	ONGOING
PhD	3	1
Master	3	1

AREAS OF EXPERTISE

Actuarial Mathematics | Mortality Trends | Social Security

ACADEMIC QUALIFICATION

2009 **PhD** - Sains Aktuari

2001 **Master** - Sains Aktuari

2001 **Bachelor** - Computational & Industrial

1998 **Diploma** - Sains Matematik

RESEARCH

1. **FORMULATION OF LONG TERM PENSION SUSTAINABILITY MODEL FOLLOWING POPULATION AGEING IN MALAYSIA**

2020 | GERAN KPT | COMPLETED | MAIN RESEARCHER

2. **FORECASTING THE MORTALITY RATES ELDERLY IN MALAYSIA**

2015 | GERAN PENYELIDIKAN PENTADBIR | COMPLETED | MAIN RESEARCHER

3. **MATHEMATICAL MODELING AND COMPUTER IMPLEMENTATION OF PENSION COSTS PROJECTION**

2011 | GERAN KPT | COMPLETED | MAIN RESEARCHER

PUBLICATION

1. MORTALITY TRENDS AND ITS IMPACT ON THE PENSION LIABILITIES

JOURNAL OF ARTIFICIAL INTELLIGENCE AND TECHNOLOGY

2025 JOURNAL OTHER DATABASE MAIN AUTHOR

2. ANALYSIS OF CHANGES IN TOTAL ACTUARIAL LIABILITIES USING PROJECTED UNIT CREDIT METHOD

JOURNAL OF QUALITY MEASUREMENT AND ANALYSIS

2024 JOURNAL OTHER DATABASE MAIN AUTHOR

3. FUNDING FOR LONG-TERM CARE COST: AN ANALYSIS AMONG MALAYSIAN ELDERLIES IN SELANGOR

MALAYSIAN JOURNAL OF MEDICINE AND HEALTH SCIENCES

2022 JOURNAL OTHER DATABASE MAIN AUTHOR

4. IMPAK PANDEMIK COVID-19 TERHADAP TABUNG PERSARAAN RAKYAT MALAYSIA DARI PERSPEKTIF SAINS AKTUARI

NORMA BAHARU: USAHA SAINS MEMAHAMI KEPERLUAN MASYARAKAT

2022 CHAPTER IN BOOK MAIN AUTHOR

5. LONG-TERM CARE FOR REHABILITATION IN MALAYSIA

2021 BOOK MAIN AUTHOR

6. MORTALITY TRENDS OF MALE ELDERLY IN MALAYSIA: COMPARISON BETWEEN LEE-CARTER MODEL AND HELIGMAN-POLLARD MODEL

JOURNAL OF MECHANICS OF CONTINUA AND MATHEMATICAL SCIENCES

2019 JOURNAL ISI MAIN AUTHOR

7. IMPACT OF AN AGEING POPULATION ON PENSION EXPENDITURE USING AUTOREGRESSIVE DISTRIBUTED LAG MODEL

ASM SCIENCE JOURNAL

2019 JOURNAL SCOPUS MAIN AUTHOR

8. SAINS AKTUARI: APLIKASI DALAM BIDANG PENCEN

2019 BOOK MAIN AUTHOR

9. MORTALITY TRENDS OF MALE ELDERLY IN MALAYSIA: COMPARISON BETWEEN LEE-CARTER MODEL AND HELIGMAN-POLLARD MODEL

2ND RECENT TREND IN SCIENCE AND ENGINEERING RESEARCH INTERNATIONAL CONFERENCE

2018 PROCEEDING NON-INDEX MAIN AUTHOR

10. IMPACT OF AN AGEING POPULATION ON PENSION EXPENDITURE IN MALAYSIA

26TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES 2018

2018 PROCEEDING NON-INDEX MAIN AUTHOR

11. FORECASTING THE MORTALITY RATES OF MALAYSIAN POPULATION USING HELIGMAN-POLLARD MODEL

AIP CONF. PROC

2017 JOURNAL WOS MAIN AUTHOR

PUBLICATION

12. FORECASTING THE MORTALITY RATES USING LEE-CARTER MODEL AND HELIGMAN-POLLARD MODEL

JOURNAL OF PHYSICS: CONFERENCE SERIES

2017 | JOURNAL | SCOPUS | MAIN AUTHOR

13. AGEING POPULATION IN MALAYSIA

AN APPLICATION TO ACTUARIAL SCIENCE, RISK MANAGEMENT AND FINANCIAL MATHEMATICS CURRICULUM

2017 | CHAPTER IN BOOK | MAIN AUTHOR

14. FORECASTING THE MORTALITY RATES OF MALAYSIAN POPULATION USING HELIGMAN-POLLARD MODEL

24TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES

2016 | PROCEEDING | NON-INDEX | MAIN AUTHOR

15. A STUDY ON LONGEVITY FACTOR: THE CASE OF GOVERNMENT PENSIONER IN MALAYSIA

INTERNATIONAL JOURNAL OF BUSINESS AND SOCIETY

2015 | JOURNAL | SCOPUS | MAIN AUTHOR

16. ANALYSIS OF MORTALITY TRENDS BY SPECIFIC ETHNIC GROUPS AND AGE GROUPS IN MALAYSIA

AIP CONFERENCE PROCEEDINGS

2014 | JOURNAL | WOS | MAIN AUTHOR

17. THE IMPACT ON PENSION LIABILITIES OF MALAYSIAN GOVERNMENT PENSION SCHEME FROM REMARRIAGE DUE TO REMOVAL OF PENSION CLAUSE

AIP CONFERENCE PROCEEDINGS

2014 | JOURNAL | WOS | MAIN AUTHOR

18. THE IMPACT ON PENSION LIABILITIES OF MALAYSIAN GOVERNMENT PENSION SCHEME FROM REMARRIAGE DUE TO REMOVAL OF PENSION CLAUSE

THE 3RD INTERNATIONAL CONFERENCE ON QUANTITATIVE SCIENCES AND ITS APPLICATIONS

2014 | PROCEEDING | NON-INDEX | MAIN AUTHOR

19. DEMOGRAPHIC TRANSITION IN MALAYSIA: THE TRENDS AND ITS IMPLICATIONS

PIONEERING ISLAMIC SCIENCE SPEARHEADING KNOWLEDGE

2014 | CHAPTER IN BOOK | MAIN AUTHOR

20. COMPARISON OF THREE METHODS FOR ESTIMATING COMPLETE LIFE TABLES

AIP CONFERENCE PROCEEDINGS

2013 | JOURNAL | WOS | MAIN AUTHOR

21. ESTIMATING A COMPLETE LIFE TABLE USING THE HELIGMAN-POLLARD MODEL, SIX-POINT LAGRANGIAN INTERPOLATION AND KING�S OSCULATORY INTERPOLATION

INSURANCE AND TAKAFUL JOURNAL

2013 | JOURNAL | OTHER DATABASE | MAIN AUTHOR

22. STUDY THE IMPACT ON PENSION LIABILITIES AS THE AGE OF RETIREMENT INCREASES.

INTERNATIONAL JOURNAL OF TRADE, ECONOMICS AND FINANCE

2013 | JOURNAL | OTHER DATABASE | MAIN AUTHOR

PUBLICATION

23. STUDY THE IMPACT ON PENSION LIABILITIES AS THE AGE OF RETIREMENT INCREASES

3RD INTERNATIONAL CONFERENCE ON BUSINESS AND ECONOMICS RESEARCH

2013 PROCEEDING NON-INDEX MAIN AUTHOR

24. ANALYSIS OF MORTALITY TRENDS BY SPECIFIC ETHNIC GROUPS AND AGE GROUPS IN MALAYSIA

21TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES

2013 PROCEEDING NON-INDEX MAIN AUTHOR

25. A STUDY ON LONGEVITY FACTORS FOR THE NEW AND OLD GOVERNMENT PENSION POLICIES IN MALAYSIA

MALAYSIAN JOURNAL OF ECONOMIC STUDIES

2012 JOURNAL WOS MAIN AUTHOR

26. THE IMPACT OF INCREASING RETIREMENT AGE ON LONGEVITY FACTOR: AN EMPIRICAL STUDY FOR GOVERNMENT PENSIONERS IN MALAYSIA

JURNAL EKONOMI MALAYSIA

2012 JOURNAL WOS MAIN AUTHOR

27. COMPARISON OF THREE METHODS FOR ESTIMATING COMPLETE LIFE TABLE

20TH NATIONAL SYMPOSIUM ON MATHEMATICAL SCIENCES

2012 PROCEEDING NON-INDEX MAIN AUTHOR

28. METHODS OF EXPANDING AN ABRIDGED LIFE TABLES: COMPARISON BETWEEN TWO METHODS

SAINS MALAYSIANA

2011 JOURNAL WOS MAIN AUTHOR

29. PARAMETER ESTIMATION OF MORTALITY MODEL USING THE LEVENBERG-MARQUARDT ALGORITHM

THE INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, MATHEMATICS AND HUMANITIES (ICASMH 2011)

2011 PROCEEDING NON-INDEX MAIN AUTHOR

30. METHODS OF EXPANDING ABRIDGED LIFE TABLES: COMPARISON BETWEEN TWO METHODS

SEMINAR KEBANGSAAN SAINS KOMPUTER DAN MATEMATIK (SKSKM 2010)

2010 PROCEEDING NON-INDEX MAIN AUTHOR

31. A COMPARISON OF THE NEW GOVERNMENT PENSION POLICY AND THE OLD GOVERNMENT PENSION POLICY IN MALAYSIA

SIMPOSIUM KEBANGSAAN SAINS MATEMATIK KE- 17

2009 PROCEEDING NON-INDEX MAIN AUTHOR

32. EXPANDING AN ABRIDGED LIFE TABLE USING THE HELIGMAN-POLLARD MODEL

MATEMATIKA

2008 JOURNAL WOS MAIN AUTHOR

33. THE IMPACT OF INCREASING RETIREMENT AGE ON THE LONGEVITY FACTOR FOR THE PENSIONER SURVIVES OR DIES IN MALAYSIA

INTERNATIONAL CONFERENCE ON MATHEMATICS AND NATURAL SCIENCES

2008 PROCEEDING NON-INDEX MAIN AUTHOR

PUBLICATION

34. A STUDY ON THE LONGEVITY FACTOR FOR THE GOVERNMENT PENSIONER IN MALAYSIA

SIMPOSIUM KEBANGSAAN SAINS MATEMATIK KE -16

2008 PROCEEDING NON-INDEX MAIN AUTHOR

35. THE ACTUARIAL IMPLICATIONS IN THE LONG TERM TO THE GOVERNMENT OF INCREASING THE COMPULSORY RETIREMENT AGE ON THE GOVERNMENT PENSION SCHEME IN MALAYSIA

THE 9TH ISLAMIC COUNTRIES CONFERENCE ON STATISTICAL SCIENCES

2007 PROCEEDING NON-INDEX MAIN AUTHOR

CONSULTATION

1. PANEL PENILAI AUDIT DAN AKREDITASI PROGRAM PENGAJIAN BSC(SAINS AKTUARI), FAKULTI SAINS & TEKNOLOGI, UKM

2015 NATIONAL

2. PEMERIKSA SKRIP JAWAPAN MATEMATIK MATRIKULASI KEMENTERIAN PENDIDIKAN MALAYSIA(SAINS-QS015)

KEMENTERIAN PENDIDIKAN MALAYSIA

2013 NATIONAL

3. PEMERIKSA SKRIP JAWAPAN MATEMATIK TULEN STPM

MATRIKULASI KEMENTERIAN PENDIDIKAN MALAYSIA

2013 NATIONAL

4. KHIDMAT PAKAR RUJUK BAGI MEMBANGUNKAN PROGRAM BARU- DIPLOMA SAINS (MATEMATIK KEWANGAN) DI KOLEJ RISDA

KOLEJ RISDA

2013 NATIONAL

5. PEMERIKSA SKRIP JAWAPAN MATEMATIK MATRIKULASI KEMENTERIAN PENDIDIKAN MALAYSIA(SAINS-QS015)

2012 NATIONAL

AWARDS/RECOGNITION

1. ANUGERAH HAFLUSFAST 2024, KLUSTER PENERBITAN, FAKULTI SAINS DAN TEKNOLOGI (ANUGERAH PENERBITAN JURNAL BERINDEKS WOS/SCOPUS/MYCITE)

2025 OTHERS

2. ANUGERAH HAFLUSFAST 2024, KLUSTER PENERBITAN, FAKULTI SAINS DAN TEKNOLOGI (ANUGERAH PENERBITAN JURNAL Q1)

2025 OTHERS

AWARDS/RECOGNITION

3. ANUGERAH HAFLUSFAST 2024, KLUSTER PENERBITAN, FAKULTI SAINS DAN TEKNOLOGI (ANUGERAH PENERBITAN PROSIDING BERINDEKS WOS/SCOPUS)

2025 OTHERS

4. PENGHARGAAN KECEMERLANGAN PERKIDMATAN 2024 (LNPT MELEBIHI 95%)

2025 OTHERS

5. VISITING SCHOLAR

UNIVERSITAS PADJADJARAN, INDONESIA

2025 INTERNATIONAL