CHUN-HOUH CHEN 陳君厚
Personal Résumé – November 2025

Current Positions

Distinguished Research Fellow, Institute of Statistical Science, Academia Sinica
Adjoint Professor of Biostatistics, Vanderbilt University Medical Center
Secretary-General, Academia Sinica
President, Chinese Statistical Association (Taiwan)
Immediate Past-President, International Association for Statistical Computing (IASC)

Contact Information

Address:	128 Academia Road Sec.2, Nankang, Taipei 115, Taiwan
Office:	Room 209
Telephone:	+886 2 27835611 ext 407
Facsimile:	+886 2 27886833
Email:	cchen@stat.sinica.edu.tw
URL:	gap.stat.sinica.edu.tw/

Executive Summary

A statistician with over 30 years of academic and administrative experience, Dr. Chen has served in key leadership positions at Academia Sinica and internationally. His pioneering research in data/information visualization, dimension reduction, and multivariate methods has garnered substantial recognition, including 6,445 citations and an h-index of 35. A committed mentor and collaborator, he has driven multiple high-impact initiatives, including the Taiwan Precision Medicine Initiative and Taiwan Biobank, and delivered numerous keynote lectures around the world.

Education

- **Ph.D. in Mathematics** (1987–1992)
  Department of Mathematics, University of California, Los Angeles (UCLA)
  Supervisor: Prof. Ker-Chau Li
- **M.S. in Mathematics (Statistics Program)** (1987–1990)
  Department of Mathematics, UCLA
- **B.S. in Statistics** (1980–1984)
  National Chung-Hsing University, Taiwan

Research Interests

- Biobanking, Bioinformatics

- Data/Information/Matrix Visualization
- Dimension Reduction
- Multivariate Statistical Methods
- Pattern Recognition

Scientometrics

Google Scholar (as of November 2025) https://scholar.google.com/citations?user=Ua8lkosAAAAJ&hl=en
- Citations: 6,445 (1,738 since 2020)
- h-index 35 (20 since 2020)
- i10-index 62 (41 since 2020)

ORCID ID: https://orcid.org/0000-0003-0899-7477

Professional Experience

2025 – present	Distinguished Research Fellow, Institute of Statistical Science, Academia Sinica
2025 – present	Adjoint Professor of Biostatistics, Vanderbilt University Medical Center
2024 – present	Secretary-General, Academia Sinica
2019 – present	Co-Principal Investigator, Taiwan Precision Medicine Initiative, Academia Sinica
2011 – 2025	Research Fellow, Institute of Statistical Science, Academia Sinica
2023 – 2024	Deputy Secretary-General, Academia Sinica
2017 – 2023	Director, Institute of Statistical Science, Academia Sinica
2017 – 2023	Co-Director, Data Science Degree Program, National Taiwan University and Academia Sinica
2019 – 2022	Co-Principal Investigator, Taiwan Biobank, Academia Sinica
2016 – 2017	Director, Department of Academic Affairs and Instrument Service, Academia Sinica
2012 – 2016	Deputy Director, Institute of Statistical Science, Academia Sinica
2002 – 2011	Associate Research Fellow, Institute of Statistical Science, Academia Sinica
2007 – 2010	Adjunct Associate Professor, Institute of Statistics, National Central University
2005 – 2010	Core Faculty Member, Bioinformatics Ph.D. Program, Taiwan International Graduate Program, Academia Sinica
1993 – 2002	Assistant Research Fellow, Institute of Statistical Science, Academia Sinica
1998 – 1999	Adjunct Assistant Professor, Graduate Institute of Epidemiology, College of Public Health, National Taiwan University, Taiwan
1994 – 1995	Adjunct Associate Professor, Institute of Mathematical Statistics, National Chung-Cheng University, Taiwan
1992 – 1993	Assistant Professor, Department of Statistics/Computer and Information Systems, George Washington University, Washington, D.C., U.S.A.

Editorial and Other Academic Services:

Academic Society:

Leadership in Statistical Communities

I have played a leading role in **international and national statistical societies**, shaping policies and fostering interdisciplinary collaboration.

📌 **International:**

- **President, International Association for Statistical Computing (IASC)** (2023–2025)
- **Council Member, International Statistical Institute (ISI)** (2015-2019)
- **Chairperson, The Asian Regional Section (ARS) of IASC** (2013-2015)

As the only (or first) Taiwanese scholar to hold all these international leadership positions, I have both pioneered Taiwan's academic participation in global affairs and worked tirelessly to encourage more local colleagues to engage in international service—substantially raising Taiwan's visibility and influence on the global stage.

📌 **National:**

- **President, Chinese Statistical Association (Taiwan) (CSAT)** (2023–2026)
- **President, Chinese Institute of Probability and Statistics (CIPS)** (2013–2016)

CIPS and **CSAT** are the two major statistical societies in Taiwan. CIPS consists exclusively of academic members, whereas CSAT includes representatives from both academia and government statistical agencies. As **President of CSAT**, I became the **first academic** (since 1930) **to lead** an institution traditionally headed by the serving **Minister of the Directorate General of Budget, Accounting, and Statistics (DGBAS)** of Taiwan Government. This role has enabled me to **strengthen collaborations between academia and public statistical agencies**.

Administrative Contributions at Academia Sinica

📌 **Key Leadership Roles**

- **Secretary-General, AS (2024–present)**
- **Deputy Secretary-General, AS (2023–2024)**
- **Director, Institute of Statistical Science (ISS), AS (2017–2023)**
- **Director, Department of Academic Affairs and Instrument Service (DAAIS), AS (2016–2017)**
- **Deputy Director, ISS, AS (2012–2016)**

Since 2012, I have consistently served in executive roles in AS, guiding its strategic direction, advancing research excellence, and heightening its global scientific profile. In my capacities as Secretary-General and Deputy Secretary-General, I oversee **high-level administrative operations**, optimize **resource allocation**, and foster **cross-disciplinary collaboration**. As Director of ISS, I shaped forward-looking research agendas, integrated **big data analytics** and **deep learning** into **interdisciplinary studies**, and **mentored emerging scholars**. I also introduced the **ISS Fisher** (**confirmatory**, three-to-five-year) and **Tukey** (**exploratory seed**, one-to-two-year) **programs**, with the **Data Information Statistical Cooperation Center** as a **core facility** of AS, to provide data science and statistical consulting services that stimulate wide-ranging **collaborations within AS**. In my role leading the DAAIS, I streamlined academic support systems and upgraded **AS Core Facilities** to boost research innovation. Collectively, these leadership experiences have fortified both the ISS and Academia Sinica as premier research institutions, amplified Taiwan's global presence in science, and catalyzed meaningful cooperation across various disciplines for the betterment of society.

Strategic Research Initiatives

As Secretary-General, I also in charge of the initiatives such as the **AI Promotion Office** and coordinate large-scale interdisciplinary projects in Academia SInica, including the "**Innovative AI Applications in**

Humanities and Scientific Research" and "**Biomedical Data and Precision Medicine**" programs.

Editorships:

- Associate Editor, ***Computational Statistics*** (2004 - 2020)
- Associate Editor, ***Computational Statistics and Data Analysis*** (2004 - 2018)
- Associate Editor, ***Journal of the Japan Statistical Society*** (2013 - 2016)
- Statistics Consultant, ***Taiwanese Journal of Psychiatry*** (1996 - 2000)
- Associate Editor, ***BMC*** *(BioMed Central)* ***Research Notes*** (2008 - 2016)
- Associate Editor, ***Statistica Sinica*** (2005 - 2008)
- Associate Editor, ***Journal of the Korean Statistical Society*** (2002 - 2005)

Conference Organization

Chairman:

- The 9th Conference of the Asian Regional Section of the IASC, December 17th ~ 19th, 2015, Singapore.
- Statistical Computing Asia 2015, July 1~2, 2015, Taipei, Taiwan.
- The 4th Workshop in Symbolic Data Analysis (SDA 2014), June 13th ~ 16th, 2014, Taipei, Taiwan.
- ISI-ISM-ISSAS (Indian Statistical Institute, Institute of Statistical Mathematics, Institute of Statistical Science, Academia Sinica) Joint Conference 2013, January 31st ~ February 1st, 2013, Taipei, Taiwan.
- Joint Meeting of the 2011 Taipei International Statistical Symposium and 7th Conference of the Asian Regional Section of the IASC (Joint2011), December 16th ~ 19th, 2011, Taipei, Taiwan.
- Statistical Computation and Visualization 2008 (SCV2008), December 1st ~ 3rd, 2008, Taipei, Taiwan.

Member of Conference **International Organizing Committee**:

- Joint Meeting of the IASC Satellite Conference for the 59th ISI WSC and the 8th Conference of IASC-ARS, Seoul, Korea (2013).

Consultative Members:

- Joint Meeting of 10th Asian Regional Section (ARS) of the International Association for Statistical Computing (IASC) and the NZ Statistical Association (NZSA), December 10th ~ 14th, 2017, Auckland, New Zealand.
- The 22nd International Conference on Computational Statistics (CompStat2016), August 23rd ~ 26th, 2016, Oviedo, Spain. (Consultative Member of SPC).
- International conference on mathematics, statistics, and financial mathematics 2014 (ICMSFM2014) with IASC-ARS sessions, Petaling Jaya, Malaysia.

Member of **Scientific Program Committee (SPC)**:

- IX Latin American Conference on Statistical Computing (LACSC 2025), November 3-7, 2025, Valparaíso, Chile.
- Symbolic Data Analysis Workshop 2025 (SDA 2025), June 9-11, 2025, Varaždin, Croatia.
- 2024 IMS International Conference on Statistics and Data Science (ICSDS), December 16-19, 2024, Nice, France.
- VIII Latin American Conference on Statistical Computing (LACSC), July 15-19, 2024, San José, Costa Rica.
- The International Symposium on Business and Industrial Statistics (ISBIS 2024), July 11-13, 2024, Special Region of Yogyakarta, Indonesia.
- Symbolic Data Analysis Workshop 2023 (SDA 2023), November 2-4, 2023, Cnam (Conservatoire

National des Arts et Métiers). rue Saint Martin 292 Paris.
- IASC-ARS Interim Conference "The Interplay between Statistical Computing and AI," December 12-13, 2022, Education University of Hong Kong, Hong Kong.
- Symbolic Data Analysis Workshop 2022 (SDA 2022), September 7-8 2022, Caserta, Italy.
- Data Science, Statistics and Visualisation 2022 (DSSV 2022), June 27-29, 2022, National Cheng Kung University, Tainan, Taiwan.
- 2022 IMS International Conference on Statistics and Data Science (ICSDS), December 13-16, 2022, Florence, Italy.
- Data Science, Statistics and Visualisation 2021 (DSSV 2021), July 7-9, 2021, Erasmus University Rotterdam, The Netherlands.
- The 16th IMT-GT International Conference on Mathematics, Statistics and their Applications (ICMSA 2020), 23 & 24 November 2020 in Klang Valley, Malaysia.
- 2020 Symbolic Data Analysis Workshop (SDA2020), June 11-12, 2020, Caserta, Italy.
- Data Science, Statistics and Visualisation (DSSV2018), July 9-11, 2018, Vienna University of Technology, Austria.
- The 61st World Statistics Congress (ISI2017), July 16th ~ 21st, 2017, Marrakech, Morocco. (**Vice-Chair** of SPC).
- The 5th Workshop in Symbolic Data Analysis (SDA 2015), November 17th ~ 19th, 2015, Orléans, France.
- IASC Satellite Conference 2015: Statistical Computing for Data Science, August 2nd ~ 4th, 2015, Búzios, Brazil.
- 2014 Computer Graphics Workshop (CGW 2014), Taipei, Taiwan (2014).
- The International Statistical Institute Regional Statistics Conference 2014 (ISI-RSC 2014), Kuala Lumpur, Malaysia (2014).
- 2013 Computer Graphics Workshop (CGW 2013), Hsin-chu, Taiwan (2013).
- The 2013 ICSA International Conference, Hong Kong (2013).
- 2012 Computer Graphics Workshop (CGW 2012), Puli, Taiwan (2012).
- The 4th IEEE Pacific Visualization Symposium, Hong Kong (2011).
- 2011 Computer Graphics Workshop (CGW 2011), Taipei, Taiwan (2011).
- The 3rd IEEE Pacific Visualization Symposium, Taipei, Taiwan (2010).
- Joint meeting of 4th World Conference of IASC and 6th Conference of IASC-ARS, Yokohama, Japan (2008).
- The IASC-ARS Special Conference, Seoul, Korea (2007).
- Workshop on Data and Information Visualization, Berlin, Germany (2006).
- The 4th Conference of IASC-ARS, Busan, Korea (2002).

Selected Invited International Presentations (Since 2004)

Keynote/Plenary Lectures:

International

- **Keynote** Lecture: "Categorical and Cartographical Matrix Visualization," The 13th conference of the Asian Regional Section of the International Association for Statistical Computing, Ho Chi Minh City, Vietnam (2025).
- **Keynote** Lecture: "Matrix Visualization and Exploratory Data Analysis," IX Latin American Conference on Statistical Computing (LACSC 2025), Valparaíso, Chile (2025).

- **Keynote** Lecture: "Statistical Computing and Artificial Intelligence: A Smart Health Project as An Example," IASC-ARS Interim Conference 2022, The Education University of Hong Kong, **Hong Kong** (2022).
- **Banquet** Speech: Symposium in honor of Professor Higuchi's retirement from the director-general of The Institute of Statistical Mathematics. Hitotsubashi Hall, National Center of Sciences Building, **Tokyo, Japan** (2019).
- **Banquet** Speech: The IASC-ARS 25th Anniversary Conference and the Chinese Association for Statistical Computing 2nd Annual Conference. **Beijing, China** (2018).
- **Keynote** Lecture: "Matrix Visualization: New Generation of Exploratory Data Analysis," 2014 Korean Statistical Society Fall Conference, **Seoul, Korea** (2014).
- **Plenary** Talk: "Visualization of Publication Profile for A Statistician", Applicable Semiparametrics, Humboldt-Universität zu **Berlin, Germany** (2013).
- **NCTR Center Seminar Talk** "A Brave New World of Biomedical Sciences: Statistics and Visualization ", National Center for Toxicological Research, FDA, **USA** (2012).
- **Keynote** Lecture: "Visual information mining of high-dimensional data structure with generalized association plots", Symposium on Large-scale Data Linkage, Data Mining and Statistical Methods, **Tokyo, Japan** (2008).
- **NCTR Center Seminar Talk**: "Visualization and Information Mining for High Dimensional Biomedical Data", National Center for Toxicological Research, FDA, **USA** (2005).
- **Opening** Keynote Lecture: "Dimension Free Data Visualization and Information Mining", 16th Symposium of International Association for Statistical Computing (COMPSTAT 2004), Prague, Czech Republic (2004).

Domestic

- **Keynote** Lecture: "Matrix Visualization," The 34th South Taiwan Statistical Conference and the 2025 Annual Conference of the Chinese Institute of Probability and Statistics (CIPS), Taipei, Taiwan (2025).
- **Keynote** Lecture: "Matrix Visualization with Applications," 2019 Taiwan Econometric Society Annual Conference, Taipei, Taiwan (2019).

Invited Workshops (at least 3-hour lecture):

- Statistical Graphics and Data Visualization, **Indian Statistical Institute, Kolkata, India** (2020).
- Statistical Graphics and Data Visualization, **Waseda University, Tokyo** (2019).
- Two-day Workshop on "Matrix Visualization: Approaching Statistics and Statistical Approach," Institute for Statistics und Econometrics, **Humboldt-Universität zu Berlin, Germany** (2014).
- Ph.D. Course on "Matrix Visualization: Approaching Statistics and Statistical Approach," **Charles University in Prague, Czech Republic** (2013).
- Two-month Workshop on Some Extensions and Applications of Matrix Visualization Using GAP, **Institute of Statistical Mathematics, Tokyo, Japan** (2011).
- Information Visualization for High Dimensional Data:the Matrix Visualization Approach, Section on Statistical Computation, **Korean Statistical Society, Korea, Seoul, Korea** (2009).
- Information Visualization for High Dimensional Data:the Matrix Visualization Approach, Busan & Kyungnam Branch of the **Korean Statistical Society, Busan, Korea** (2009).
- Information Visualization for High Dimensional Biomedical Data: the Matrix Visualization Approach, International Conference of Bioinformatics (InCoB), Taipei, Taiwan (2008).
- High dimensional data visualization: the matrix visualization approach, International Conference on the Frontiers of Statistics, **Kunming, China** (2007).
- Tutorial on Matrix Visualization and Information Mining, The Fourth Asia Pacific Bioinformatics Conference, **Taipei, Taiwan** (2006).

- GAP: Generalized Association Plots for Dimension Free Data Visualization, The 5th IASC Asian Conference on Statistical Computing, **Hong Kong**. (2005).
- Two-day Workshop on Dimension Free Data Visualization and Information Mining, **Institute of Statistical Mathematics, Tokyo, Japan** (2004).
- Data- and Information visualization: Generalized Association Plots, Institute for Statistics und Econometrics, **Humboldt-Universität zu Berlin, Germany** (2004).

Invited Talks (Selected list from 2000 onward):

- Data Science, Statistics and Big Health Data, **Prof. Toshinari Kamakura's Retirement Commemoration Symposium**, 18 March 2024, Okinawa, Japan.
- Data Science and Statistics: A Smart Health Project as An Example, **64th ISI World Statistics Congress 2023**, 17 July 2023, Ottawa, Canada.
- iGAPdb: A Matrix Visualization Database for Interval-valued Symbolic Data Sets, 8th Workshop on Symbolic Data Analysis (**SDA2022**), September 7-8, 2022, University of Campania L. Vanvitelli, Italy.
- cGAPdb: A matrix visualization database for categorical data sets, 24th International Conference on Computational Statistics (**CompStat 2022**), August 23-26, 2022, University of Bologna, Italy.
- Matrix Visualization for Big Data, **Indian Statistical Institute**, Kolkata, India (2020).
- Matrix Visualization: New Generation of Exploratory Data Analysis, **Waseda University**, Tokyo (2019).
- Matrix Visualization: New Generation of Exploratory Data Analysis, **Universiti Tunku Abdul Rahman (UTAR)**, Kuala Lumpur, Malaysia (2019).
- Examples of matrix visualization for exploratory data analysis (EDA), The International Statistical Institute Regional Statistics Conference 2014 (**ISI-RSC 2014**), Kuala Lumpur, Malaysia (2014).
- Exploratory Data Analysis of Interval--valued Symbolic Data with Matrix Visualization, International conference on mathematics, statistics, and financial mathematics 2014 (**ICMSFM2014**) with IASC-ARS sessions, Petaling Jaya, Malaysia (2014).
- Matrix Visualization: Approaching Statistics and Statistical Approach, **Korean National Open University**, Seoul, Korea (2014).
- Some Extensions of Matrix Visualization: the GAP Approach, **Seoul National University**, Seoul, Korea (2014).
- Matrix Visualization for Health Statistics: Phenotype, Environtype, and Genotype, **5th Asia-Pacific Conference on Public Health**, Seoul, Korea (10-11 April, 2014).
- Covariate-adjusted matrix visualization via correlation decomposition, **Charles University in Prague**, **Czech Republic** (2013).
- Matrix Visualization for Symbolic Data Analysis, **The Technical University of Liberec, Czech Republic** (2013).
- Matrix Visualization for High-Dimensional Data with a Cartography Link, **Palacký University, Czech Republic** (2013).
- Matrix visualization for high-dimensional categorical data structure, **Masaryk University, Czech Republic** (2013).
- Matrix Visualization: Approaching Statistics and Statistical Approach, **National University of Singapore** (Singapore) (2012).
- Matrix Visualization with Biomedical Research Applications, **East Asia Regional Biometric Conference 2012**, Seoul, Korea (2012).
- Matrix Visualization: Approaching Statistics and Statistical Approach, The 58th World Statistics Congress of the International Statistical Institute (**ISI2011**), Dublin, Ireland (2011).
- Matrix Visualization for Symbolic Data Analysis, **2nd Workshop in Symbolic Data Analysis**, University of Namur, Namur, Belgium (2011).

- Matrix Visualization for High-Dimensional Categorical Data Structure with a Cartography Link, International Workshop on Information System for Social **Innovation, Institute of Statistical Mathematics**, Tokyo, Japan (2011).
- Matrix Visualization and its Extension to Symbolic Data Analysis, シンボリックデータ解析に関する講演会, Hokkaido University, Sapporo, Japan (2011).
- Matrix visualization with applications: EDA for the 21st century, **Chinese Week of Humboldt-Universität zu Berlin**, Humboldt-Universität zu Berlin, Berlin, Germany (2010).
- Matrix visualization with applications: EDA (exploratory data analysis) for the 21st century, Sungkyunkwan University, Suwon, Korea (2010).

Teaching

Statistical Graphics and Data Visualization, Multivariate Analysis, Statistical Computing

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Graduate Students and Postdoctoral Fellows

Graduated Master Students: 4, Ph.D. Students: 2, Postdoctoral Fellows: 15.

Research Funding

- PI, National Science and Technology Council (NSTC) individual projects: (2022-2026).
- PI, Ministry of Science and Technology (MOST) individual projects: (2012-2022).
- PI, Core Facility Component Project of Department of Life Sciences, National Science Council (NSC100-2319-B-010-002) (2011/05/01 - 2012/04/30): "Bioinformatics Consortium of Taiwan: Genomic Statistics for Life Science Studies Unit"
- PI, Core Facility Component Project of National Research Program for Genomic Medicine (NRPGM), NSC (2008/05/01-2011/04/30)**:** "Advanced bioinformatics core: Genomic Statistics for Complex Diseases"
- PI, Program Project of Genomic and Proteomic Program, Academia Sinica (2005/01/01-2007/12/31): "Bioinformatic Study of Yeast Cis-regulatory Elements and Circuits"
- PI, Program Project of Academia Sinica Theme Project (2002/01/01-2004/12/31): "Information Visualization of Bioinformatics" in "Development of Knowledge-based Human Biology Databases"
- PI, National Science Council (NSC) individual projects: (1994-2008).

Academic Visiting

- Department of Statistics, The University of Auckland, Auckland, New Zealand.
- Network Information System Laboratory, Doshisha University, Kyoto, Japan.
- Department of Statistics and Applied Probability, National University of Singapore, Singapore.
- Department of Prob. and Mathematical Statistics, Charles University in Prague, Czech Republic
- Center for Applied Statistics and Economics, Humboldt-Universität zu Berlin, Germany
- Institute of Mathematical Statistics, Tokyo, Japan
- Department of Statistics, SungKyunKwan University, Korea

- Department of Statistics, Pukyong National University, Korea
- National Center of Toxicology Research, Little Rock, Arkansas, USA

Publications

* These authors contributed equally † These authors jointly supervised this work ✉ email (Correspondence and requests for information)

Refereed Journal Articles

1. Yang HC*✉, Kwok PY*✉, Li LH*, Liu YM*, Jong YJ*, Lee KY*, …, Wu MS†, Pang ST†, Chen SA†, Chen WM†, Chen CH†, Sheu WHH†, Wu JY†✉ (2025) The Taiwan Precision Medicine Initiative: A Cohort for Large-Scale Studies, ***Nature***, 648, 117–127, 15 October 2025. (link)
2. Chen HH*✉, Chen CH*, Hou MC*, Fu, YC*, …, Chen CH,(9/128) …, Sheu WHH†, Yang SF†, Liou JM†, Wang JY†, Chiou JF†, Wu JY†, Fann CS-J†✉ (2025) Population-Specific Polygenic Risk Scores Developed for the Han Chinese, ***Nature***, 648, 128–137, 15 October 2025. (link)
3. Wei, C. Y.*✉, Wen, M. S.*, Cheng, C. K.*, Sheen, Y. J.*, Yao, T. C.*, Lee, S. L.*, …, Chen, C. H., (10/123) …, Chen, C. H.†✉, Chien, C. C.†✉, Chiang, H. S.†✉, Chiu, Y. L.†✉, Chen, H. C.†✉, and Kwok, P. Y.†✉ (2025) Clinical Impact of Pharmacogenetic Risk Variants in a Large Chinese Cohort, ***Nature Communications***, 16(6344), 09 July 2025. (link)

↥ Distinguished Research Fellow (July 10, 2025)

↧ Research Fellow

4. Chi IJ, Tsai SJ, Chen CH, Yang AC✉ (2025) Identifying Distinct Developmental Patterns of Brain Complexity in Autism: A Cross-Sectional Cohort Analysis Using the Autism Brain Imaging Data Exchange, ***Psychiatry and Clinical Neurosciences***, 79(3), 98-107, 11 January 2025, https://doi.org/10.1111/pcn.13780.
5. Huang YJ, Chen CH, Yang HC✉ (2024) AI-Enhanced Integration of Genetic and Medical Imaging Data for Risk Assessment of Type 2 Diabetes, ***Nature Communications*** **15**, 4230 (2024). https://doi.org/10.1038/s41467-024-48618-1.
6. Yen TJ✉, Yang CT, Lee YJ, **Chen CH**, Yang HC (2024) Fatty liver classification via risk controlled neural networks trained on grouped ultrasound image data, ***Scientific Reports*** 14, 7345 (2024). https://doi.org/10.1038/s41598-024-57386-3.
7. Ashouri M, Shmuel, G, Chen CH, Phoa KH✉ (2023) An interactive clustering-based visualization tool for air quality data analysis, ***Aerosol and Air Quality Research*** 23(12), 2023 October 1. doi:10.4209/aaqr.230124.
8. Huang HL, Huang YJ, Chu YC, Chen CW, Yang HC, Hwang JS, Chen CH, Chan TC✉ (2023) Exploring factors underlying poorly-controlled asthma in adults by integrating phenotypes and genotypes associated with obesity and asthma: a case-control study, ***Journal of Asthma and Allergy*** 2023 Jan 21;16:135-147. doi: 10.2147/JAA.S397067.
9. Chen Y, Koch T✉, Zakiyeva N, Liu KL, Xu ZT, Chen CH, Nakano J, Honda K (2023) Article's scientific prestige: Measuring the impact of individual articles in the web of science, ***Journal of Informetrics*** 17(1), January 2023, 101379.
10. Huang YJ, Chu YC, Chen CW, Yang HC, Huang HL, Hwang JS, Chen CH, and Chan TC✉ (2022),

Relationship among genetic variants, obesity traits and asthma in the Taiwan Biobank. ***BMJ Open Respiratory Research*** 2022;9:e001355. doi:10.1136/ bmjresp-2022-001355.

11. Yang HC✉, Wang JH, Yang CT, Lin YC, Hsieh HN, Chen PW, Liao HC, Chen CH, and Liao JC✉ (2022), Subtyping of major SARS-CoV-2 variants reveals different transmission dynamics based on 10 million genomes, ***PNAS Nexus,*** 2022, pgac181, https://doi.org/10.1093/pnasnexus/pgac181.

12. Kuo YH, Chou Charles CK, Fujiwara T, Chen CH, and Ma KL✉ (2022), Visual Analytics of Air Pollution Data with Machine-Learning-Aided Analysis Workflows (April 2022), ***The 15th IEEE Pacific Visualization Symposium*** (***IEEE PacificVis 2022***), 10.1109/PacificVis53943.2022.00018.

13. Kwon OH, Kao CH, Chen CH, and Ma KL✉ (2022), A Deep Generative Model for Reordering Adjacency Matrices, ***IEEE Transactions on Visualization and Computer Graphics***, doi: 10.1109/TVCG.2022.3153838.

14. Yang HC✉, Chen CH, Wang JH, Liao HC, Yang CT, Chen CW, Lin YC, Kao CH, Lu MYJ, and Liao JC✉ (2020), Analysis of genomic distributions of SARS-CoV-2 reveals a dominant strain type with strong allelic associations, ***Proceedings of the National Academy of Sciences,*** Nov 2020, 202007840; DOI: 10.1073/pnas.2007840117.

15. Wu HM, Kao CH, and Chen CH✉ (2020), Dimension reduction and visualization of symbolic interval-valued data using sliced inverse regression, ***Advances in Data Science: Symbolic, Complex and Network Data****, Diday E, Guan R, Saporta G, Wang H (eds)*. London: Wiley-ISTE, 49-78.

16. Wu HM, Tien YJ, Ho MR, Hwu HG, Lin WC, Tao MH, Chen CH✉ (2018), Covariate-adjusted heatmaps for visualizing biological data via correlation decomposition, ***Bioinformatics***, 34(20), 3529–3538.

17. Yang HC, Chen IC, Tsay YC, Li ZR, Chen CH, Hwu HG, and Chen CH (2017), Using an Event-History with Risk-Free Model to Study the Genetics of Alcoholism, ***Scientific Reports***, 7: 1975.

18. Chatla SB, Chen CH, and Shmuéli G (2017), Selected topics in statistical computing, ***Encyclopedia with Semantic Computing and Robotic Intelligence,*** March 2017, Vol. 01, No. 01, World Scientific Publishing Company.

19. Huang CC, Tien YJ, Chen MJ, Chen CH, Ho HN, Yang YS (2015) Symptom patterns and phenotypic subgrouping of women with polycystic ovary syndrome: Association between endocrine characteristics and metabolic aberrations, ***Human Reproduction***, 30(4), 937–946.

20. Kuo YL, Chen CH, Chuang TH, Hua WK, Lin WJ, Hsu WH, Chang PMH, Hsu SL, Huang TH, Kao CY, Huang FCY (2015), Gene expression profiling and pathway network analysis predicts a novel anti-tumor function for a botanical-derived drug, PG2, ***Evidence-Based Complementary and Alternative Medicine (eCAM)***, 2015, Article ID 917345.

21. Chen TC, Lin KT, Chen CH, Lee SA, Lee PY, Liu YW, Kuo YL, Wang FS, Lai JM, Huang FCY (2014), Using an in Situ Proximity Ligation Assay to Systematically Profile Endogenous Protein−Protein Interactions in a Pathway Network, ***Journal of Proteome Research***, 2014, 13, 5339−5346.

22. Kao CH, Nakano J, Shieh SH, Tien YJ, Wu HM, Yang CK, and Chen CH✉ (2014). Exploratory data analysis of interval-valued symbolic data with matrix visualization, ***Computational Statistics and Data Analysis***, 79 (2014), 14-29.

23. Chien WH, Gau SSF, Chen CH, Tsai WC, Wu YY, Chen PH, Shang CY, Chen CH (2013) Increased gene expression of FOXP1 in patients with autism spectrum disorders. ***Molecular Autism***, 4:23.

24. Liu CH, Chen TC, Chau GY, Jan YH, Chen CH, Hsu CN, Lin KT, Juang YL, Lu PJ, Cheng HC, Chen MH, Chang CF, Ting YS, Kao CY, Hsiao M, and Huang FCY (2013). Analysis of protein-protein interactions in cross-talk pathways reveals CRKL as a novel prognostic marker in hepatocellular carcinoma. ***Molecular and Cellular Proteomics***, 12, 1335-1349.

25. Yang HC, Liu CM, Liu YL, Chen CW, Chang CC, Fann CSJ, Chiou JJ, Yang YC, Chen CH, Faraone SV, Tsuang MT and Hwu HG (2013). The DAO Gene Is Associated with Schizophrenia and Interacts with Other Genes in the Taiwan Han Chinese Population. ***PLoS ONE***, 8:3.

26. Chen YC, Tien YJ, Chen CH, Beltran FN, Amor EC, Wang RJ, Wu DJ, Mettling C, Lin YL, and Yang WC (2013). Morus alba and active compound oxyresveratrol exert anti-inflammatory activity via inhibition of leukocyte migration involving MEK/ERK signaling. ***BMC Complementary and Alternative Medicine***, 13:45.

27. Liu CC, Tien YJ, Chen CH, Chiu YN, Chien YL, Hsieh MH, Liu CM, Hwang TJ, and Hwu HG (2013). Development of a brief self-report questionnaire for screening putative pre-psychotic states. ***Schizophrenia Research***, 143(1), 32-37.

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Package download

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Online demo

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- *iGAP* (Symbolic-Interval): https://maokao.github.io/iGAPOnline/
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- *3d GAP* (Cube-based): https://maokao.github.io/GAP3D/