

# Curriculum Vitae

## 1. Personal Information :

Name: Chia-Chyang Chang (C.C. Chang)  
Title: Professor of Geomatics/ Dean of Engineering Faculty  
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## 2. Education :

BSc (1983), Department of Surveying Engineering, Chung Cheng Institute of Technology, Taiwan  
MSc (1987), Institute of Photogrammetry, National Cheng Kung University, Taiwan  
PhD (1995), Institute of Engineering Surveying and Space Geodesy, University of Nottingham, UK

## 3. Professional Experience :

Lecturer, 1987-1992, Department of Surveying and Mapping Engineering, Chung Cheng Institute of Technology, Taiwan  
Associate Professor, 1996-2000, Department of Surveying and Mapping Engineering, Chung Cheng Institute of Technology, Taiwan  
Professor, 2000-2005, Department of Surveying and Mapping Engineering, Chung Cheng Institute of Technology, Taiwan  
Professor and Head, 2005-2007, Department of Information Management, Yu Da University, Taiwan  
Professor and Head, 2007-2012, Department of Applied Geomatics, Chien Hsin University of Science and Technology, Taiwan  
Professor and Dean, 2012-, Engineering Faculty, Chien Hsin University of Science and Technology, Taiwan

## 4. Expertise :

Satellite Positioning, Geodetic Surveying, Mobile Positioning, Geospatial Application

## 5. Publications :

### (A) Peer-reviewed Papers

1. Chang, C C (1987), Refraction Corrections Applied to Precise Levelling, *Chinese Journal of Surveying Engineering*, Vol 29, No 2, pp 21-32.
2. Chang, C C (1988), Computations of Vertical Gradient for Gravity, *Chinese Journal of Surveying Engineering*, Vol 30, No 3, pp 1-12.
3. Chang, R G, C C Chang and J T Lee (1990), A Gravimetric Geoid in Taiwan Area, *International Association of Geodesy Symposia 104*, Sea Surface Topography and the Geoid, Edited by H Sunkel and T Baker, Springer-Verlag, pp. 61-72.
4. Chang, C C (1992), Investigations of Gravimetric Quantities in the Taiwan Area Using Geopotential Model of OSU89, *Chinese Journal of Surveying Engineering*, Vol 34, No 1, pp 67-82.
5. Chang, C C (1996), High Precision GPS Using Orbit Improvement Technique, *Chinese Journal of Surveying Engineering*, Vol 38, No 2, pp 1-12.
6. Chang, C C (1997), Estimations of Sea Surface Topography Based on GPS, Tidal Record, and Geoid, *Chinese Journal of Surveying Engineering*, Vol 39, No 1, pp 37-45.
7. Chang, C C and R G Chang (1998), Preliminary Stability Test for the Regional GPS Tracking Stations in Taiwan, *International Association of Geodesy Symposia 118*, Advances in Positioning and Reference Frame, Edited by F K Brunner, Springer-Verlag, pp 114-119.
8. Chang, C C and S H Lin (1999), Testing a Medium-Range DGPS Network for the Taiwan Area, *The Journal of Navigation*, Vol 52, No 2, pp 279-288.
9. Chang, C C and C L Tseng (1999), Testing on Tropospheric Modelling for GPS Tracking Stations in Taiwan, *Geomatics Research Australasia*, No 70, pp 77-94.
10. Chang, C C and C L Tseng (1999), A Geocentric Reference System in Taiwan, *Survey Review*, Vol 35, No 273, pp 195-203.
11. Chang, C C (1999), Geophysical Effects on Site Displacements for Permanent GPS Tracking Stations in Taiwan, *Geomatics Research Australasia*, No 71, pp 1-17.
12. Chang, C C and H C Chen (2000), Coordinate Variations of GPS Tracking Stations Related to the Transformation of Reference Frames, *Chinese Journal of Surveying Engineering*, Vol 42, No 1, pp 53-68.
13. Chen, H C and C C Chang (2000), Testing and Analysis to the Coordinate Movements and the Distribution of GPS Tracking Station, *Chinese Cadastral Survey*, Vol 19, No 1, pp 1-16.
14. Chang, C C (2000), GPS-based Landslide Estimation on Residential Slope, *Chinese Journal of Surveying Engineering*, Vol 42, No 4, pp 67-82.
15. Chang, C C (2000), Estimation of Local Subsidence Using GPS and Leveling Data, *Surveying and Land Information System*, Vol 60, No 2, pp 85-94.
16. Chang, C C (2000), Estimates of Horizontal Displacements Associated with the 1999 Taiwan Earthquake, *Survey Review*, Vol 35, No 278, pp 563-568.

17. Tsui, I F, H W Lee and C C Chang (2002), Evaluation of GPS-based Attitude Determinations Applied to Bathymetric Corrections, *Chinese Journal of Surveying Engineering*, Vol 44, No 1, pp 37-52.
18. Lee, A B and C C Chang (2002), Tests of GPS Positioning under High-Voltage Power Environment, *Chinese Cadastral Survey*, Vol 22, No 1, pp 1-13.
19. Chang, C C , H W Lee, J T Lee and I F Tsui (2002), Multi-applications of GPS for Hydrographic Surveys, *International Association of Geodesy Symposia 125*, Vistas for Geodesy in the New Millennium, Edited by J Adam and K-P Schwarz, Springer-Verlag, pp 353-358.
20. Chang, C C, H W Lee and I F Tsui (2002), Preliminary Test of Tide-independent Bathymetric Measurement Based on GPS, *Geomatics Research Australasia*, No 76, pp 23-36.
21. Chang, C C and H W Lee (2003), Evaluation of GPS-Based Attitude Parameters Applied to Bathymetric Measurements, *Wuhan University Journal of Nature Science*, Vol 8, No 2B, pp 685-692.
22. Ning, F S, S P Kao, C C Chang and X Meng (2003), Evaluations to the Effectiveness of GPS Pseudolite, *Chinese Cadastral Survey*, Vol 22, No 4, pp 22-39.
23. Wu C C and C C Chang (2003), Discussions on WGS84 Coordinates Referred to TWD97, *Chinese Cadastral Survey*, Vol 22, No 4, pp 40-52.
24. Chang, C C and Y D Sun (2004), Application of a GPS-based Method to Tidal Datum Transfer, *The Hydrographic Journal*, No 112, pp 15-20.
25. Chang, C C and T N Wang (2006), GPS Monitoring of Land Subsidence Associated with Seasonal Underground Water Decline: Case Analysis for a Section of Taiwan High Speed Rail, *Surveying and Land Information Science*, Vol 66, No 1, pp 45-54.
26. Chang, C C and W Y Tsai (2006), Evaluation of a GPS-based Approach for Rapid and Precise Determination of Geodetic/Astronomical Azimuth, *Journal of Surveying Engineering*, Vol 132, No 4, pp 149-154.
27. Chang, C C and H C Hwang (2007), Estimation of Horizontal Movement Function for Geodetic- or Mapping-Oriented Maintenance in the Taiwan Area, *International Association of Geodesy Symposia 130*, Dynamic Planet: Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools, Chapter 96, Edited by P Tregoning and C Rizos, Springer-Verlag, pp 665-670.
28. Ning, F S, S P Kao, C C Chang and X Meng (2007), A Simulation of the Effect of GPS Pseudolite Observations on the Obstructed Sky View, *Survey Review*, Vol 39, No 303, pp 34-42.
29. Kao, S P, H N Chen, F S Ning and C C Chang (2007), Evaluation of GPS/Galileo Navigation Accuracy with GPS-based Simulated Data, *Chinese Journal of Surveying Engineering*, Vol 49, No 1-2, pp 1-17.
30. C C Chang, P C Lou and C C Wu (2007), Applying RFID to Detect and Manage the Indoor

Moving Paths, *Chinese Journal of Surveying Engineering*, Vol 49, No 3-4, pp 5-18.

31. C C Chang, P C Lou and H Y Chen (2008), Designing and Developing a RFID-based Indoor Guidance System, *Chinese Cadastral Survey*, Vol 27, No 2, pp 1-17.
32. Chang, C C, P C Lou and P J Ke (2008), Test of Simulated Pseudolite Measurement Applied to GPS and Multi-Pseudolite Integrated Positioning, *Survey Review*, Vol 40, No 309, pp 212-220.
33. Chang, C C, P C Lou and H Y Chen (2008), Designing and Implementing a RFID-based Indoor Guidance System, *Journal of Global Positioning Systems*, Vol 7, No 1, pp 27-34.
34. Shen, L C, J C Juang, C L Tsai, C C Chang, P Y Ko and C L Tseng (2009), Stream Soil Moisture Estimated by Reflected GPS Signals With Ground Truth Measurements, *IEEE Transactions on Instrumentation and Measurement*, DOI 10.1109/TIM.2008.2005821, Vol 58, No 3, pp 730-737.
35. Chang, C C, L S Hwang and S Y Lee (2009), Evaluation of Medium-Range Kinematic GPS Using Interpolated Data, *Journal of Chung Cheng Institute of Technology*, Vol 37, No 2, pp. 87-103.
36. Chang, C C and H Y Lee (2011), Performance of High Rate Interpolated Data Applied to GPS Kinematic Positioning, *Survey Review*, Vol 43, No 321, pp 303-313.(SCI)
37. Chang, C C, P C Lou and Y G Hsieh (2012), Indoor Locating and Inventory Management based on RFID-Radar Detecting Data, *Journal of Applied Geodesy*, Vol 6, No 1, pp 47-54.
38. Chang, C C, G W Lee and C L Chiang (2012), Distance Computation and Trajectory Management Using GPS Navigation Positioning Solution, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 41, No 1, pp 93-104.
39. Chang, C C, G W Lee and Y C Ding (2014), Indoor Location Awareness and Application Using Multi-types of RFID, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 43, No 1, pp 67-80.
40. Chang, C C, G W Lee and Y G Yang (2015), A New Indoor 3D Positioning Approach Using Single WiFi AP, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 44, No 2, pp 1-10.
41. Chang, C C and G W Lee (2016), New Geomatic Techniques Applied to the Public Utilities Data Construction, *Newsletter of National Land Information System*, No 99, pp 10-19.
42. Chang, C C, M T Tsai and C C Kao (2016), Detection of Road Roughness by Using Post-Processed Kinematic GNSS, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 45, No 2, pp 29-36.
43. Chang, C C, G W Lee and T Z Lee (2017), Cooperative Indoor Localization with Ranging and Orientation Data, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 46, No 2, pp 43-50.
44. Chang, C C and P Y Cheng (2019), Production and Implementation of GPS Auxiliary Observations for Satellite Navigation Positioning, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 48, No 2, pp 43-52.

45. Chang, C C and G W Lee (2020), GNSS Moving Baseline Solutions Tested for Collision Avoidance Spatial Parameters, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 49, No 2, pp 11-22.
46. Chang, C C and J S Huang (2020), Application and Comparison of the Measurements for Earthwork Volume, *Chinese Journal of Surveying Engineering*, Vol 59, pp 18-31.
47. Chang, C C (2022), GNSS Determination of Road Elevation Information Required for 3D Pipeline Reduction, *Journal of Chung Cheng Institute of Technology (EI)*, Vol 51, No 1, pp 43-54.
48. Chang, C C (2023), GNSS Kinematic Positioning Test Using Modified Signals Received by Smartphones, *Journal of Chung Cheng Institute of Technology (EI)*, to be published in May.

(B) *Conference Papers (International)*

1. Chang, R G and C C Chang (1990), Using the Electronic Chart for Automated Navigation in Taiwan Area, XIX International Congress, FIG, Helsinki, Finland.
2. Chang, C C, V Ashkenazi, R M Bingley and A H Dodson (1994), Use of GPS for Absolute Sea Level Monitoring Along the Atlantic Coast of Europe, 18th United Kingdom Geophysical Assembly (UKGA-18), University of Liverpool, UK.
3. Ashkenazi, V, R M Bingley, C C Chang, A H Dodson, J A Torres, C Boucher, H Fagard, J L Caturla, R Quiros, J Capdevlla, C Calvert, T F Baker, A Rius and P A Cross (1994), EUROGAUGE: the West European Tide Gauge Monitoring Project, Proceedings of International Symposium on Marine Positioning (INSMAP-94), Hamburg, Germany, pp 224-233.
4. Ashkenazi, V, G A Beamson, R M Bingley, C C Chang, A H Dodson and T Moore (1995), Measuring Changes in Mean Sea Level to Millimetres by GPS, Proceedings of 30th MAFF Conference of River and Coastal Engineers, University of Keele, UK, pp 7.1.1-7.1.8.
5. Ashkenazi, V, R M Bingley, C C Chang, A H Dodson, J A Torres, C Boucher, H Fagard, J L Caturla, R Quiros, J Capdevlla, C Calvert, T F Baker, A Rius and P A Cross (1995), Monitoring Tide Gauge Heights in Western Europe Using GPS, XXI General Assembly of IUGG, Boulder, Colorado, USA.
6. Dodson, A H, R M Bingley, C C Chang, H Denker, D Behrend and W Torge (1995), An Investigation of Sea Surface Topography Around Western Europe from GPS, Geoid and Tide Gauge Data, XXI General Assembly of IUGG, Boulder, Colorado, USA.
7. Ashkenazi, V, R M Bingley, C C Chang, A H Dodson, T F Baker, A Rius, P A Cross, J A Torres, C Boucher, H Fagard, J L Caturla, R Quiros and C Calvert (1996), The Results of EUROGAUGE: The West European Tide Gauge Monitoring Project, *Annales Geophysicae*, European Geophysical Society, Symposia on Solid Earth Geophysics and Natural Hazards, Supplement 1 to Vol 14, pp C270.
8. Chang, C C, V Ashkenazi, R M Bingley and A H Dodson (1996), The Effect of Fixing or Improving Satellite Orbits on High Accuracy GPS, Proceedings of 1996 International

Conference on GPS, pp 35-41, Taipei, Taiwan.

9. Chang R G, C C Chang and J T Lee (1997), Monitoring of Continuously Operating GPS Stations in Taiwan Area, Proceedings of the International Symposium on Current Crustal Movement and Hazard Reduction in East Asia and Southeast Asia, Wuhan, PRC, Seismological Press, pp 64-73.
10. Chang, C C, J T Lee and M T Tsai (1998), Monitoring of Ground Subsidence in Southwest Taiwan Using GPS and Levelling Data, Supplements to Eos Transactions, American Geophysical Union, Vol. 79, No. 24, 1998 Western Pacific Geophysics Meeting, pp W11.
11. Chang, C C and R G Chang (1998), Preliminary Stability Test for the Regional GPS Tracking Stations in Taiwan, International Association of Geodesy Symposia 118, Advances in Positioning and Reference Frames, 1997 Scientific Assembly of the IAG, Rio de Janeiro, Brazil, Edited by F K Brunner, Springer-Verlag, pp 114-119.
12. Chang, R G and C C Chang (1999), Analysis and Scheme for Absolute and Relative Gravity Measurements in Taiwan Area, 1999 General Assembly of the European Geophysical Society, 19-23 April, Hague, The Netherlands.
13. Chang, C C (1999), Investigation of Site Displacements due to Tidal Loading Effects for GPS Array in Taiwan, XXII General Assembly of IUGG, Birmingham, UK, Abstract A, pp 410.
14. Chang, C C and H C Chen (1999), Tests for the Maintenance of Fundamental GPS Networks in Taiwan, XXII General Assembly of IUGG, Birmingham, UK, Abstract A, pp 411.
15. Chang, R G and C C Chang (1999), Analysis of Gravity Measurements for New Height System in Taiwan, XXII General Assembly of IUGG, Birmingham, UK, Abstract A, pp 435.
16. Chang, R G and C C Chang (2000), Analysis of the Results of the Absolute Gravity Repetition Measurements in Pacific Asia and Taiwan Area, Supplements to Eos Transactions, American Geophysical Union, Vol 81, No 22, 2000 Western Pacific Geophysics Meeting, pp WP19.
17. Chang, C C, H W Lee and Y D Sun (2003), Transferring Tidal Datum Based on GPS Height Solutions, 2003 IUGG General Assembly, Soporro, Japan, Abstract A, pp 232.
18. Chang, C C and Y D Sun (2003), Connecting Tidal Datums with GPS, The 7<sup>th</sup> South East Asian Survey Congress, Hong Kong, 15 pp.
19. Ning, F S, S Y Kao, C C Chang and X Meng (2004), Preliminary Test of Using Pseudolite to Improve GPS Precision, The 1<sup>st</sup> FIG International Symposium on Engineering Surveys for Construction Works and Structural Engineering, Nottingham, UK.
20. Chang, C C and T N Wang (2004), Analysis of Land Subsidence and Underground Water Decrease for C270 Section of Taiwan High Speed Rail, Supplements to Eos Transactions, American Geophysical Union, Vol 85, No 28, Western Pacific Geophysical Meeting.
21. Chang, C C and P J Ke (2005), Developing and Testing a Virtual Pseudolite (VPL) Technique for GPS Positioning, Dynamic Planet 2005, 22-26 August, Cairns, Australia.
22. Chang, C C, P C Lou and P J Ke (2005), Simulation Tests for Indoor Positioning with Real

- and Virtual GPS Pseudolite Observations, International Symposium on GPS/GNSS 2005, 8-10 December, The Hong Kong Polytechnic University, Hong Kong.
23. Shen, L C, C L Tseng, J C Juang and C C Chang (2006), Design of an Integrated GPS Receiver for the Processing of Reflected GPS Signals, Proceedings of the Institute of Navigation - 19<sup>th</sup> International Technical Meeting of the Satellite Division, ION GNSS 2006, pp. 3140-3146.
  24. Shen, L C, C L Tseng, J C Juang and C C Chang (2007), New Application of Reflected GPS Signals L1/L2 Observation Techniques with an Integrated GPS Receiver for Ground Object Detection and Digital Elevation Mapping, Proceedings of the Institute of Navigation, National Technical Meeting, pp. 461-472.
  25. Shen, L C, J C Juang, C L Tsai , C L Tseng and C C Chang (2007), Applications of an Integrated GPS Receiver for Reflected GPS Signals L1/L2 Observation Techniques with River's Stream Flow and Water Altimetry, Proceedings of the Annual Meeting - Institute of Navigation, pp. 340-345.
  26. Shen, L C, J C Juang, C L Tseng, C L Tsai and C C Chang (2007), New Application of Reflected GPS Signals L1/L2 Observation Techniques with an Integrated GPS Receiver for Remote Measurements and Digital Terrain Elevation Mapping, 2007 Instrumentation and Measurement Technology Conference (IEEE IMTC 2007), 1-3 May, Warsaw, Poland.
  27. Chang, C C, P S Hung and H Z Chen (2007), Fitness Analysis of Height Variation for GPS Monitoring Site, FIG Working Week 2007, 13-17 May, Hong Kong.
  28. Shen, L C, J C Juang, C L Tseng and C C Chang (2007), Improving Instantaneous Atmospheric Corrections for Reflected GPS Signals L1/L2 Observation Techniques with an Integrated GPS Receiver, 2007 International Waveform Diversity and Design Conference (IEEE WDD 2007), 5-8 June, Pisa, Italy.
  29. Chang, C C, P C Lou and H Y Chen (2007), Designing and Implementing a RFID-based Indoor Guidance System, Proceedings of the 4th International Symposium on LBS and TeleCartography, Hong Kong, pp 49-59.
  30. Shen, L C, C L Tsai , P Y Ko, J C Juang, C L Tseng and C C Chang ( 2008 ) , Applications of an Integrated GPS Receiver for Reflected GPS Signals L1/L2 Observation Techniques with Remote Sensing Ocean Altimetry and Ground Object Detection, International Geoscience and Remote Sensing Symposium (IGARSS), 7-11 July 2008, Boston, Massachusetts, article no 4423982, pp.4991-4996.
  31. Chen, H Z, P S Hung and C C Chang (2008), Testing Prediction Models of Land Subsidence on GPS Permanent Station, Geoinformatics'2008, 28-29 June, Guangzhou, China.
  32. Shen, L C, J C Juang and C C Chang (2008), Terrain Moisture and Stream Level for Integrated Reflected GPS System Using Reflectivity and Elevation Map, NAV08/ILA37 Conference, Royal Institute of Navigation, 28-30 October, London, UK.
  33. Chang, C C and H Y Lee (2008), Accuracy Assessment of GPS Kinematic Positioning based on Densified Observables, International Symposium on GPS/GNSS 2008, 11-14 November,

Tokyo, Japan, pp 819-827.

34. Chang, C C, C L Chiang, M J Wu and K H Lai (2009), Designing the Vehicular Management Information Systems based on Stand-alone GPS Positioning Data, 2009 International Symposium on GPS/GNSS, 4-6 November, Jeju, Korea, 7 pages.
35. Chang, C C, P C Lou and Y G Hsieh (2011), Indoor Locating and Inventory Management based on RFID-Radar Detecting Data, 2011 IUGG General Assembly, 27 June - 7 July, Melbourne, Australia, Abstract ID 697.
36. Chang, C C (2011), Applications of Indoor Locating Technique based on Various Types of RFID, International Symposium on GPS/GNSS 2011, 15-17 November, Sydney, Australia.
37. Chang, C C and Y G Yang (2012), Combination of GPS Orbit and WiFi Ranging Data for Indoor Positioning, International Symposium on GPS/GNSS 2012, 31 October-2 November, Xi'an, China.
38. Chang, C C and G W Lee (2013), Using RFID for Indoor Location-based Applications, 2<sup>nd</sup> International Conference on Computation Theory and Information Technology (CT&IT 2013), 26-28 March, Taoyuan, Taiwan.
39. Chang, C C and Z Y Lee (2014), Using Point or Surface Feature of Sensing Data for Pedestrian Positioning in the GPS Obstructed Area, International Symposium on GNSS 2014 (ISGNSS 2014), 21-24 October, Jeju, Korea.
40. Chang, C C and C C Kao (2015), Evaluations of Road Roughness Measuring based on GNSS Observations, 2015 Hong Kong International Conference on Engineering and Applied Science, 16-18 December, Hong Kong. Conference Proceedings (Natural Science), pp 135-142.
41. Chang, C C and Z Y Lee (2016), A Connecting Type of Localization using Reference Beacon and Multiple Devices, International Symposium on GNSS 2016 (ISGNSS 2016), 5-7 December, Tainan, Taiwan.
42. Chang, C C, M T Tsai and C L Wu (2017), GPS Horizontal Densified Surveying with Post-Processing VRS Data, International Symposium on GNSS 2017 (ISGNSS 2017), 10-13 December, Hong Kong.
43. Chang, C C and P Y Cheng (2018), Navigation Positioning Assisted with Virtual Ranges to the Obstructed Satellites, International Symposium on GNSS 2018 (ISGNSS 2018), 21-23 November, Bali, Indonesia.
44. Chang, C C (2019), Determination of Collision Avoidance Spatial Information Using GNSS, International Symposium on GNSS 2019 (ISGNSS 2019), 29 Oct-1 Nov, Jeju, Korea.
45. Chang, C C and C H Su (2020), Application and Assessment to UAV Locating Techniques, NE China-Taiwan Academic Exchange Conference 2020 (video), 17 Oct, Shenyang, China.
46. Chang, C C (2020), GNSS MBL Applied to Determine Spatial Avoidance Parameters, Beijing-Taiwan Young Scientist Forum 2020 (video), 23 Oct, Beijing, China.
47. Chang, C C (2021), Road Elevation Model Tested for 3D Pipeline Applications, Beijing-Taiwan Young Scientist Forum 2021 (video), 24 Nov, Beijing, China.



(C) Patent

Category	Patent Title	Country	Patent No	Inventor	Assignee	Date of Patent	End of Patent
發明專利	定位方法及其電子裝置	TW	I570424	李智鴻 周澤民 張嘉強	財團法人資訊工業策進會	2017/02/11	2033/11/26
Invention	METHOD OF POSITIONING AND ELECTRONIC APPARATUS USING THE SAME	USA	US 9,588,228 B2	C-H Li D-M Jou C-C Chang	INSTITUTE FOR INFORMATION INDUSTRY	2017/03/07	2038/05/26
新型專利	即時定位系統	TW	M616880	張嘉強	健行科技大學	2021/09/11	2031/04/22