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## Education

- 2007 DOCTOR OF PHILOSOPHY, ENGINEERING MANAGEMENT, UNIVERSITY OF MISSOURI-ROLLA, UNITED STATES
- 2007 GRADUATE CERTIFICATE, FINANCIAL ENGINEERING UNIVERSITY OF MISSOURI-ROLLA, UNITED STATES
- 2003 MASTER OF SCIENCE, ENGINEERING MANAGEMENT UNIVERSITY OF MISSOURI-ROLLA, UNITED STATES
- 2002 MASTER OF BUSINESS ADMINISTRATION, CHULALONGKORN UNIVERSITY, THAILAND
- 1996 BACHELOR OF ENGINEERING, CIVIL ENGINEERING, CHULALONGKORN UNIVERSITY, THAILAND

## Awards and Honors

- NOMINATED FOR BEST DISSERTATION AWARD 2008  
THE AMERICAN SOCIETY OF ENGINEERING MANAGEMENT (ASEM), USA
- OUTSTANDING GRADUATE STUDENT RESEARCH AWARD 2006-2007 DEPARTMENT OF ENGINEERING MANAGEMENT AND SYSTEMS ENGINEERING UNIVERSITY OF MISSOURI-ROLLA, USA
- BEST GRADUATE STUDENT POSTER AWARD 2007  
DEPARTMENT OF ENGINEERING MANAGEMENT AND SYSTEMS ENGINEERING UNIVERSITY OF MISSOURI-ROLLA, USA
- DOCTORAL SCHOLARSHIPS (2004 - 2007)  
DEPARTMENT OF ENGINEERING MANAGEMENT AND SYSTEMS ENGINEERING UNIVERSITY OF MISSOURI-ROLLA, USA
- DOCTORAL SCHOLARSHIPS (2004)  
INTELLIGENT SYSTEMS CENTER  
UNIVERSITY OF MISSOURI-ROLLA, USA

## Work Experience

### ***2023 – PRESENT CHULALONGKORN UNIVERSITY TRANSPORTATION INSTITUTE (CUTI)***

- DEPUTY DIRECTOR OF TRANSPORTATION INSTITUTE, CHULALONGKORN UNIVERSITY (CUTI)
- PROJECT LEADER OF GREEN LOGISTICS AND SUPPLY CHAIN MANAGEMENT PROGRAM (2023)

### ***2008 – PRESENT CHULALONGKORN BUSINESS SCHOOL, CHULALONGKORN UNIVERSITY***

- HEAD, DEPARTMENT OF COMMERCE (2015 – 2022)
- DIRECTOR OF MASTER OF MANAGEMENT PROGRAM (INTERNATIONAL PROGRAM) (2015 – 2023)
- FULL – TIME FACULTY, DEPARTMENT OF COMMERCE, TEACH QUANTITATIVE BUSINESS ANALYSIS, OPERATIONS MANAGEMENT, DECISION MAKING IN BUSINESS (2008 – PRESENT)
- SECRETARY DEPARTMENT OF COMMERCE (2012 – 2014)
- DIRECTOR OF MODERN MANAGERS PROGRAM (MMP) (2012 – 2016)
- COMMITTEE OF MASTER OF MANAGEMENT PROGRAM (INTERNATIONAL PROGRAM) (2011 – 2014)
- COMMITTEE OF STUDENT AFFAIRS (2009 – PRESENT)
- COMMITTEE OF MODERN MANAGERS PROGRAM (MMP) (2008 – 2012)
- COMMITTEE OF ACADEMIC SERVICE AND TRAINING CENTER (2011 – 2016)
- COMMITTEE OF COMMENCEMENT REHEARSAL (2008 – PRESENT)
- PROJECT LEADER OF EXECUTIVE DEVELOPMENT AND TRAINING PROGRAM FOR TOYOTA MOTOR (THAILAND) CO., LTD. (2010 – 2016)
- PROJECT LEADER OF ADVANCED MANAGEMENT PROGRAM (AMP) FOR EXECUTIVE MANAGEMENT OF BDMS PUBLIC COMPANY (2012)
- COMMITTEE MEMBER OF STRATEGIC PLANNING PROGRAM FOR CAT TELECOMMUNICATION PUBLIC COMPANY (2011)
- EXECUTIVE COMMITTEE AND SECRETARY OF MASTER OF BUSINESS ADMINISTRATION (MBA) PROGRAM, FACULTY OF COMMERCE AND ACCOUNTANCY, CHULALONGKORN UNIVERSITY (2008 – 2009)
- COMMITTEE MEMBER OF QUALITY ASSURANCE OFFICE, FACULTY OF COMMERCE AND ACCOUNTANCY, CHULALONGKORN UNIVERSITY (2010 – 2011)
- COMMITTEE MEMBER OF REVIEW FOR GRADUATION OF BACHELOR OF BUSINESS ADMINISTRATION PROGRAM, DEPARTMENT OF COMMERCE, FACULTY OF COMMERCE AND ACCOUNTANCY, CHULALONGKORN UNIVERSITY (2008 – 2011)

### ***2007 – 2008 BUSINESS ANALYST, ADVANCE SOLUTION & CONSULTING CO., LTD.***

- THE INTEGRATED OPERATIONAL PORTFOLIO MANAGEMENT (IOPM) PROJECT
  - INVOLVED IN THE IOPM PROJECT FROM THE BEGINNING TO THE END
  - COLLECTED BUSINESS USER'S REQUIREMENTS
  - DESIGNED THE SOFTWARE USER'S REQUIREMENT FOR IOPM PROJECT TO INTEGRATE THE IOPM SYSTEM BASED ON THE WORK FLOW, INTERNAL CONTROL, AND RISK MANAGEMENT CONCEPT
  - Design the Repo module as an additional feature to IOPM system

### ***2004 – 2007 RESEARCH ASSISTANT, THE UNIVERSITY OF MISSOURI – ROLLA, USA.***

## Work Experience

### *2000 – 2000 STRUCTURAL ENGINEER, POST CO., LTD.*

- PREPARED BILL OF MATERIALS FOR CONSTRUCTION PROJECTS
- PERFORMED STRUCTURAL ANALYSES AND DESIGNS FOR CONCRETE AND STEEL STRUCTURES CONCENTRATING IN FACTORY AND WAREHOUSE PROJECTS.

### *1999 – 2000 STRUCTURAL ENGINEER AND PROJECT ENGINEER, P & CYGNA, CO., LTD.*

- PREPARED SHOP DRAWINGS FOR CONSTRUCTION PROJECTS
- SCHEDULED, COORDINATED, AND SUPERVISED CONSTRUCTION PROJECTS
- PREPARED CONSTRUCTION DOCUMENTS SUCH AS CALCULATIONS, STRUCTURAL DRAWINGS, SPECIFICATIONS, AND BILL OF MATERIALS.

### *1998 – 1999 CIVIL ENGINEER, INDUSTRIAL ESTATE AUTHORITY OF THAILAND*

- REVIEWED AND APPROVED CONSTRUCTION PERMIT DOCUMENTS TO ENSURE CONFORMANCE WITH STANDARD FACTORY
- PERFORMED INSPECTIONS FOR VARIOUS FACTORY STRUCTURES TO ENSURE COMPLIANCE WITH CONSTRUCTION DOCUMENTS
- ASSISTED IN THE STRUCTURAL DESIGN OF THE SEA WAVE PROTECTION PROJECT IN MARP-TA-PUT HARBOR, THAILAND.

### *1996 – 1998 STRUCTURAL ENGINEER, KCS & ASSOCIATE*

- PERFORMED STRUCTURAL ANALYSES AND DESIGNS OF CONCRETE AND STEEL STRUCTURES INCLUDING HIGH RISES, SHOPPING MALLS, RESIDENT BUILDINGS, TEMPLES, AND WAREHOUSES
- PROVIDED ENGINEERING SUPPORT TO OTHER DESIGN PROFESSIONALS AND CONSTRUCTION PERSONNEL
- UTILIZED ADVANCED STRUCTURAL ANALYSIS SOFTWARE TO AID IN STRUCTURAL DESIGN
- REVIEWED AND APPROVED CONSTRUCTION CALCULATIONS AND DRAWINGS EMPHASIZING IN THE DESIGN AND DETAILING OF STRUCTURAL MEMBERS AND CONNECTIONS

## Publications

### *DISSERTATION:*

**CHAVARNAKUL, T.**, 2007, "THE DEVELOPMENT OF HYBRID INTELLIGENT SYSTEMS FOR TECHNICAL ANALYSIS BASED EQUIVOLUME CHARTING", *DOCTORAL DISSERTATION UNIVERSITY OF MISSOURI-ROLLA*.

### *JOURNAL ARTICLES (INTERNATIONAL):*

- ANTARASENA, C., TANLAMAIB, U., AND **CHAVARNAKUL, T.**, 2024, "INTERNET OF THINGS USAGE EXPERIENCE MODEL: THAI MANUFACTURING SUPPLY CHAIN CONTEXT", *INTERNATIONAL JOURNAL OF LOGISTICS SYSTEMS AND MANAGEMENT* (ACCEPTED AND FORTH COMING) (SCOPUS Q3)
- TIYACHAREONSRI, S. **CHAVARNAKUL, T.**, CHANDRACHAI, A., AND TRIUKOSE, S., 2024, "HOW CONSUMER PREFERENCE DETERMINES SITE SELECTION IN A METROPOLITAN SETTING: ANALYSIS OF RETAILER PERSPECTIVE TO STAY AHEAD OF THE COMPETITION IN THE AFTERMATH OF A LARGE-SCALE CRISIS", *JOURNAL OF RETAILING AND CONSUMER SERVICES*, 78, 103704. (ISI, SCOPUS TIER1)

## Publications

- **CHAVARNAKUL, T.** , LIN,Y.C., KHAN, A. , AND CHEN, S.C., “EXPLORING THE DETERMINANTS AND CONSEQUENCES OF TASK-TECHNOLOGY FIT: A META-ANALYTIC STRUCTURAL EQUATION MODELING PERSPECTIVE”, *EMERGING SCIENCE JOURNAL*, 8(1), 77-94. (SCOPUS Q1)
- LIMPEETICHAROENCHOT, S., COOHAROJANANONE, N., **CHAVARNAKUL, T.**, CHAROENRUK, N., AND ATCHARIYACHANVANICH, K., 2022, “ADAPTIVE BIG DATA MATURITY MODEL USING LATENT CLASS ANALYSIS FOR SMALL AND MEDIUM BUSINESSES IN THAILAND”, *EXPERT SYSTEMS WITH APPLICATIONS*, 206, 117965. (ISI, SCOPUS TIER1)
- PRAVEE KRUACHOTTIKUL, P., COOHAROJANANONE, N., PHANOMCHOENG, G., **CHAVARNAKUL, T.**, KOVITANGGOON, K., AND TRAKULWARANONT, D., 2021 "DEEP LEARNING-BASED VISUAL DEFECT-INSPECTION SYSTEM FOR REINFORCED CONCRETE BRIDGE SUBSTRUCTURE: A CASE OF THAILAND'S DEPARTMENT OF HIGHWAYS", *JOURNAL OF CIVIL STRUCTURAL HEALTH MONITORING*. 11, 949–965. (ISI, SCOPUS Q1)
- LIMPEETICHAROENCHOT, S., COOHAROJANANONE, N., **CHAVARNAKUL, T.**, AND ATCHARIYACHANVANICH, K., 2020, "INNOVATIVE MOBILE APPLICATION FOR MEASURING BIG DATA MATURITY: CASE OF SMES IN THAILAND", *INTERNATIONAL JOURNAL OF INTERACTIVE MOBILE TECHNOLOGIES*. 14 (18), 87-106. (SCOPUS Q2)
- PHATANARAJATA, L., SINTHUPINYO, S., CHANDRACHAI, A., AND **CHAVARNAKUL, T.**, 2020, “ENHANCING COMPETIVENESS BY INNOVATIVE INVENTORY POOLING SYSTEM (IIPS) FOR MULTI RETAILERS”, *INTERNATIONAL JOURNAL OF BUSINESS INNOVATION AND RESEARCH*. 25(4), 453-474. (SCOPUS Q3)
- PHATANARAJATA, L., SINTHUPINYO, S., CHANDRACHAI, A., AND **CHAVARNAKUL, T.**, 2019, “INNOVATIVE INVENTORY POOLING SYSTEM BASED ON COMPUTING AND OPTIMIZATION TECHNIQUES”, *INTERNATIONAL JOURNAL OF MACHINE LEARNING AND COMPUTING (IJMLC)*, 9 (2), 168-173. (SCOPUS Q4)
- MAOLIKUL, S., KIATGAMOLCHAI, S., AND **CHAVARNAKUL, T.**, 2019, “MARKET OPPORTUNITY ANALYSIS IN THAILAND: CASE OF INDIVIDUAL POWER SOURCES BY THERMOELECTRIC-GENERATOR TECHNOLOGY FOR PORTABLE ELECTRONICS”, *INTERNATIONAL JOURNAL OF INNOVATION AND TECHNOLOGY MANAGEMENT*, 17 (1), 1950027 (24 PAGES), DOI: 10.1142/S0219877019500275 (ISI, SCOPUS Q2)
- MAOLIKUL, S., KIATGAMOLCHAI, S., AND **CHAVARNAKUL, T.**, 2017, “LOW-POWER ENERGY HARVESTING OF THERMOELECTRIC BATTERY CHARGER WITH STEP-UP DC-DC CONVERTER: APPLICABLE CASE STUDY FOR PERSONAL ELECTRONIC GADGETS”, *JOURNAL OF ENERGY ENGINEERING* 143(4): ARTICLE NUMBER 05017001 (ISI, SCOPUS Q2)
- PHATANARAJATA, L., SINTHUPINYO, S., CHANDRACHAI, A., AND **CHAVARNAKUL, T.**, 2016, “FACTORS INFLUENCING INNOVATIVE INVENTORY POOLING SYSTEM (IIPS) ADOPTION FOR RETAIL ENTREPRENEURS IN THAILAND”, *JOURNAL OF ADVANCE MANAGEMENT SCIENCE*, 4 (6), 457-461.
- MAOLIKUL, S., **CHAVARNAKUL, T.**, AND KIATGAMOLCHAI, S., 2014, “THERMOELECTRIC - GENERATOR – BASED POWER SUPPLY FOR PORTABLE CONSUMER ELECTRONIC DEVICES: A MARKET INSIGHT FOR BUSINESS OPPORTUNITY IN THAILAND”, *INTERNATIONAL JOURNAL OF MANAGEMENT AND INNOVATION* (ACCEPTED)

## Publications

- SENANURAKWARKUL, C. AND **CHAVARNAKUL, T.**, 2012, "THE STUDY OF FACTORS INFLUENCING THE DECISION TO SELECT THE USE OF OIL SORBENT IN THAILAND", *INTERNATIONAL JOURNAL OF RESEARCH IN MANAGEMENT & TECHNOLOGY*, 2 (6), 603-608.
- **CHAVARNAKUL, T.** AND D. ENKE., 2009, "INTELLIGENT HYBRID STOCK TRADING SYSTEM FOR TECHNICAL ANALYSIS BASED EQUIVOLUME CHARTING", *NEUROCOMPUTING*, 72 (16-18), 3517-3528. (ISI, SCOPUS TIER1)
- **CHAVARNAKUL, T.** AND D. ENKE., 2008, "INTELLIGENT TECHNICAL ANALYSIS BASED EQUIVOLUME CHARTING FOR STOCK TRADING USING NEURAL NETWORKS", *EXPERT SYSTEMS WITH APPLICATIONS*, 34 (2), 1004-1017. (ACCEPTED AS-IS) (ISI, SCOPUS TIER1)

## Conference proceedings

- ANJOMSHOAE, A., AGHAABBASI, M., **CHAVARNAKUL, T.**, AND BANOMYONG, R., "APPLICATIONS OF MACHINE LEARNING METHODS IN HUMANITARIAN SUPPLY CHAIN – A SYSTEMATIC LITERATURE REVIEW", *PROCEEDINGS OF 28TH INTERNATIONAL SYMPOSIUM ON LOGISTICS (ISL) 2024, JULY 2024*.
- SANGKITIWAN, J., COOHAROJANANONE, N., **CHAVARNAKUL, T.**, AND TAIPHAPOON, T., "THE SHIFT TOWARDS DATA-DRIVEN ORGANIZATIONS IN THE THAI MEDIA INDUSTRY: A FRAMEWORK FOR ADAPTATION AND TRANSFORMATION", *PROCEEDINGS OF 2024 IEEE 10TH INTERNATIONAL CONFERENCE ON APPLIED SYSTEM INNOVATION (IEEE ICASI 2024), KYOTO, JAPAN, 17-21 APRIL 2024*.
- SURIWONG, P., SUPPAVORASATIT, I., AND **CHAVARNAKUL, T.**, "THE PURCHASE INTENTIONS TOWARDS FUNCTIONAL FOOD: A SYSTEMATIC REVIEW OF THE LITERATURE", *PROCEEDINGS OF THE 41ST IBIMA INTERNATIONAL CONFERENCE, JUNE.2023*.
- KONGNIM, P., COOHAROJANANONE, N., **CHAVARNAKUL, T.**, "FORECASTING DINING TIMES IN A FULLSERVICE THAI HOTPOT RESTAURANT USING RANDOM FOREST CLASSIFIER", *PROCEEDINGS OF THE 2023 8<sup>TH</sup> INTERNATIONAL CONFERENCE ON MATHEMATICS AND ARTIFICIAL INTELLIGENCE, ICMAI, APR.2023*.
- ANTARASENA, C., TANLAMAIB, U., AND **CHAVARNAKUL, T.**, "SURVEY OF FACTORS AFFECTING INTENTION TO USE IOT IN THAILAND", *PROCEEDINGS OF THE ISPIM CONNECTS BANGKOK CONFERENCE 2020, ISPIM, MAR.2020*.
- ANTARASENA, C., TANLAMAIB, U., AND **CHAVARNAKUL, T.**, "FACTOR EFFECTING THE INTERNET OF THINGS TECHNOLOGY ADOPTION IN SUPPLY CHAIN", *PROCEEDINGS OF THE 4TH BELT AND ROAD INITIATIVE CONFERENCE 2019, : 14ASIAN LOGISTICS ROUND TABLE (ALRT), AUG.2019*.
- KRUACHOTTIKUL, P., COOHAROJANANONE, N., PHANOMCHOENG, G., **CHAVARNAKUL, T.**, KOVITANGGOON, K., TRAKULWARANONT, D., AND ATCHARIYACHANVANICH, K., "BRIDGE SUB STRUCTURE DEFECT INSPECTION ASSISTANCE BY USING DEEP LEARNING", *PROCEEDINGS OF THE 2019 IEEE 10TH INTERNATIONAL CONFERENCE ON AWARENESS SCIENCE AND TECHNOLOGY (ICAST), : 6IEEE, MORIOKA, JAPAN, OCT.2019*. (SCOPUS)
- LIMPEETICHAROENCHOT, S., COOHAROJANANONE, N., **CHAVARNAKUL, T.**, AND ATCHARIYACHANVANICH, K., 2018, "CLASSIFYING ATTITUDES OF THAI BUSINESS ORGANIZATIONS TOWARD THE PERCEIVED BENEFIT OF CUSTOMER PREDICTIVE ANALYTICS", *PROCEEDINGS OF THE 2018 JOINT 10TH INTERNATIONAL CONFERENCE ON SOFT COMPUTING*

## Conference proceedings

*AND INTELLIGENT SYSTEMS AND 19TH INTERNATIONAL SYMPOSIUM ON ADVANCED INTELLIGENT SYSTEMS*, TOYAMA, JAPAN DEC 4, 2018. (SCOPUS)

- ROJRATTANAKIAT, P. AND **CHAVARNAKUL, T.**, 2017, "FACTORS AFFECTING INFORMATION-SEEKING BEHAVIOR AND DECISION MAKING FOR PURCHASING ARCHITECTURAL MATERIALS OF ARCHITECTS", *PROCEEDINGS OF THE 4TH CONFERENCE OF MANAGEMENT SCIENCES, SUKHOTHAI THAMMATHIRAT OPEN UNIVERSITY*, CD-ROM.(IN THAI)
- SUTHIWARTNARUEPUT, K., SETAMANIT, S., MOKKHAMAKKUL, T., **CHAVARNAKUL, T.**, AND VISAMITANAN, K., 2012, "A SURVEY ON OUTCOMES EVALUATION OF SUSTAINABLE COMPETITIVE ADVANTAGE GAINED THROUGH LOGISTICS AND SUPPLY CHAIN STRATEGY OF BUSINESS IN THAILAND", *PROCEEDINGS OF THE IAME 2012 CONFERENCE*, TAIPEI, TAIWAN.
- MAOLIKUL, S., KIATGAMOLCHAI, S., AND **CHAVARNAKUL, T.**, 2011, "ARCHITECTURAL INNOVATION FORESIGHT OF THERMOELECTRIC GENERATOR CHARGER INTEGRATED PORTABLE POWER SUPPLY FOR PORTABLE CONSUMER ELECTRONIC DEVICE IN METROPOLITAN MARKET: THE CASE STUDY OF THAILAND", *PROCEEDINGS OF THE 9TH EUROPEAN CONFERENCE ON THERMOELECTRICS*, CD- ROM. 9TH EUROPEAN CONFERENCE ON THERMOELECTRICS: ECT2011. AIP CONFERENCE PROCEEDINGS, VOLUME 1449, PP. 528-531 (2012). (SCOPUS)
- **CHAVARNAKUL, T.** AND SUKSAWAT NA. AYUDHYA, W., 2010, "A NEURO-FUZZY EASE OF MOVEMENT FOR INTELLIGENT TRADING DECISIONS", *PROCEEDINGS OF THE IIE RESEARCH CONFERENCE AND EXHIBITION*, CD-ROM. (SCOPUS)
- SUKSAWAT NA. AYUDHYA, W. AND **CHAVARNAKUL, T.**, 2010, "GOAL PROGRAMMING IN OPERATIONAL INTERMODAL ROUTING DECISIONS PROBLEM", *PROCEEDINGS OF THE TISD 2010 INTERNATIONAL CONFERENCE, THAILAND*.
- **CHAVARNAKUL, T.** AND D. ENKE., 2006, "NEURO-FUZZY VOLUME ADJUSTED MOVING AVERAGES FOR INTELLIGENT TRADING DECISIONS", *PROCEEDINGS OF THE ASEM CONFERENCE*, CD-ROM. (SCOPUS)
- **CHAVARNAKUL, T.** AND D. ENKE., 2006, "STOCK TRADING USING NEURAL NETWORKS AND THE EASE OF MOVEMENT TECHNICAL INDICATOR", *PROCEEDINGS OF THE IIE RESEARCH CONFERENCE AND EXHIBITION*, CD-ROM. (SCOPUS)
- **CHAVARNAKUL, T.** AND D. ENKE., 2005, "STOCK TRADING USING NEURAL NETWORKS AND VOLUME ADJUSTED MOVING AVERAGES," *INTELLIGENT ENGINEERING SYSTEMS THROUGH ARTIFICIAL NEURAL NETWORKS*, 15, 635-643.
- **CHAVARNAKUL, T.**, D. ENKE., AND R. CHAFIN, 2004, "AN APPLICATION OF NEURAL NETWORKS WITH THE BOLLINGER BAND TECHNICAL INDICATOR FOR STOCK TRADING," *INTELLIGENT ENGINEERING SYSTEMS THROUGH ARTIFICIAL NEURAL NETWORKS*, 14, 723-728.