

# Dissemination of your research findings

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# My research goal and direction

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Making computers (or devices) to be able to provide users personalized and adaptive services based on the data (log, records, keystrokes, chats, behaviours, time-sequential events/data, etc.).

The application domains include tourism, healthcare, hospital system, education, and gaming with mobile apps/tools, web-based systems/tools, cloud-based services, standalone systems/tools, and games.

Moreover, the computers and devices capable of understanding their users' emotions as well as having their own emotions!

# Academic roles (related to research dissemination)

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- Executive vice chair of IEEE Technical Committee on Learning Technologies
  - Responsibilities include international conferences organization and newsletter, etc.
  - General program chair of the 17<sup>th</sup> IEEE International Conference on Advanced Learning Technologies (ICALT 2017)
  - The 9<sup>th</sup> IEEE international conference on Technology for Education (T4E 2017)
- Program Committee Chair of 21st Global Chinese Conference on Computers in Education (GCCCE 2017)
  - Program committee co-chair of 20<sup>th</sup> GCCCE
- Track Program Chair, IEEE ICALT track on Digital Game and Intelligent Toy Enhanced Learning, 2014~now
- Executive chair of ICCE sub-conference on Digital Game and Digital Toy Enhanced Learning and Society, 2014
  - Co-chair in 2011, 2013, and 2015
- Advisory Chair of International Conference on Mobile, Hybrid, and On-line Learning, 2012~2016
  - Steering Committee member since 2017
- Special Area Chair (Pervasive education) of International Conference on Systems and Networks Communications, 2011~now

# Academic roles (related to research dissemination)

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- Editor-in-chief of International Journal of Distance Education Technologies
  - An EI journal – Elsevier Engineering Index
  - Has been included in Web of Science's ESCI
    - Since August 2016
  - Right now under reviewed by Clarivate Analytics' Web of Science's SCIE, SSCI
    - formerly Thomson Reuters' SCIE and SSCI
- Section editor of Education and Science
  - an SSCI Open Access FREE journal
- Guest editors
  - Education and Technology Society
    - an SSCI Open Access FREE journal
  - International Review of Research in Open and Distance Learning
    - an SSCI Open Access FREE journal
  - Mathematical Problems in Engineering
    - an SCI journal
  - Multimedia Tools and Applications
    - an SCI journal
  - Research and Practice in Technology Enhanced Learning
    - an Open Access FREE journal

# Academic activities (related to research dissemination)

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- Reviewing papers
  - Served in more than 280 conferences as program committee member
    - Learning Technologies (93), Mobile/Ubiquitous Learning (36), Game-based Learning and Edutainment (38), AI and CI (22), Information Systems (94)
  - Served in more than 60 conferences as reviewer
  - Served in more than 15 journals as editorial board members
  - Served in more than 35 journals as reviewer
- Statistics
  - Averagely review 125 papers every year
  - High
    - review 55 manuscripts submitted to journals a year
    - review 145 manuscripts submitted to conferences a year
- Publications
  - Edited books/proceedings: 10
  - Book chapters: 12
  - Journal papers: 42
  - Conference/workshop papers: 138
  - Last 3-year/5-year publication numbers: 28/49

# Outline

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- Research outcome
- The differences between conference and journal
- Benefits of disseminating your research in conference/journal
- How to choose conference
- How to choose journal
- Important notes for preparing and submitting a paper
- Conclusion

# Research outcome

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- Stage based outcome
  - Systematic literature review
  - Algorithm design
  - System and/or tool implementation
  - Evaluation plan
  - Questionnaire design
  - Pilot
  - Complete experiment

# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
    - Quantitative, qualitative, or mixed
    - Not just statistics but also include summary and recommendation
      - challenges, applications and results, issues and gaps, directions
  - Algorithm design
  - System and/or tool implementation
  - Evaluation plan
  - Questionnaire design
  - Pilot
  - Complete experiment



# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
  - Algorithm design → conference paper
    - complete architecture and workflow
    - relationships and connections among algorithms
    - detailed explanations on the input/output and steps of an algorithm
    - use mocked or simulated data set (human understandable)
  - System and/or tool implementation
  - Evaluation plan
  - Questionnaire design
  - Pilot
  - Complete experiment

# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
  - Algorithm design → conference or workshop paper
  - System and/or tool implementation → conference or workshop
    - has architecture and workflow as well as step-by-step explanation
    - use real cases and flow
    - has ANNOTATED screenshots
    - better to have a plan of pilot or experiment
  - Evaluation plan
  - Questionnaire design
  - Pilot
  - Complete experiment

# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
  - Algorithm design → conference or workshop paper
  - System and/or tool implementation → conference or workshop
  - Evaluation plan → workshop paper
    - Detailed evaluation plan
    - From recruitment to procedure, to data collection, to research questions, research model, and hypotheses
    - Better to also include instruments such as questionnaire
  - Questionnaire design
  - Pilot
  - Complete experiment

# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
  - Algorithm design → conference or workshop paper
  - System and/or tool implementation → conference or workshop
  - Evaluation plan → workshop paper
  - Questionnaire design → conference or workshop paper
    - needs to have details of the items and factors/components/subscales
    - needs to have data collected from preliminary study
    - needs to do validity and reliability analysis
  - Pilot
  - Complete experiment

# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
  - Algorithm design → conference or workshop paper
  - System and/or tool implementation → conference or workshop
  - Evaluation plan → workshop paper
  - Questionnaire design → conference or workshop paper
  - Pilot → conference paper or journal paper
    - Quantitative, qualitative, or mixed
  - Complete experiment

# Research outcome vs where and what to disseminate

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- Stage based outcome
  - Systematic literature review → journal paper
  - Algorithm design → conference or workshop paper
  - System and/or tool implementation → conference or workshop
  - Evaluation plan → workshop paper
  - Questionnaire design → conference or workshop paper
  - Pilot → conference paper or journal paper
  - Complete experiment → journal paper

# The differences between conference and journal

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## Conference

### ■ Pros

- You can visit somewhere you really like to go ;-)
- You can meet people and get their idea, comments, and suggestions to improve your work
- You may receive a bag, a pen, an USB which contains all papers' PDF :p
- You may build your academic social network
  - considering attending conferences as investment

### ■ Cons

- There is registration fee
- You will need to consider other expenses like flight tickets, hotel, and meals
- You need to take several days off from your work (for full time job student)

# The differences between conference and journal

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## Journal

### ■ Pros

- Not all journals have publication fee (or article processing fee)
  - Traditional publication vs. Open-Access publication mode
- You don't need to go to anywhere
- Your work usually could be easily accessed by people via academic databases or on journal's website

### ■ Cons

- You may wonder if anyone on the earth has ever read your paper
- You won't be able to meet anyone
- You won't be able to get others' opinions, suggestions, and comments



# Benefits of disseminating your research in conf/journal

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## Conference

- Establishing your academic portfolio and CV
- Getting comments and suggestions from people (experts) to improve your research (or change it)
- Knowing people who might be able to become the external member of your examination committee in the future
- Getting connected to people who might help you conduct pilot or experiment later and even become collaborators in the future
- Seeking a job (include doing postdoc)? Or go for further PhD study?
- You may apply Profiling Alberta's Graduate Student award to cover most of your expenses
  - AU has Graduate Student Level Travel award for non-Alberta students and Graduate Student Research Fund for disseminating research result

## Journal

- Establishing your academic portfolio and CV
- Showing people your potential to be a good research (if you want to go for PhD further later)
- Possibility of having more people to be aware of your research outcome
- No need to spend money if you choose to publish in traditional publication mode or **FREE open-access journals**

# How to choose conference

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- Location
  - Is somewhere you want to go? ;-)
  - Is it convenient to be there? :p
  - Any reason to not go?
  - Is it required VISA?
  - Is VISA application complicated?
- Scope
  - Does your research topic fall into the scope?
  - Some conferences have multiple sub-conferences/tracks
- Organization
  - IEEE, ACM, IARIA, IADIS, etc.
  - Never consider WASET!
- Publisher
  - IEEE, ACM, Springer or others
- Important Dates
  - Can you prepare your first draft by at least two weeks before the due?
  - How long from the submission due date to notification date?

# How to choose journal

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- Do you prefer **SSCI, SCI, EI**?
- Do you prefer **ERIH, IBSS, ARC**?
  - European Reference Index for the Humanities
  - International Bibliography of the Social Sciences
  - Australia Research Council's Excellence Research for Australia
    - ERA 2012 and forthcoming ERA 2015
- Open Access** may be another choice?
  - Usually Open Access journals and options may have big processing fee
  - Still, some Open Access journals have no fee
- Impact factor doesn't mean too much
  - It is the impact factor of that particular journal only
  - It is only be used for journals in one of Thomson Reuters' databases
  - You research may not fit the scope of the journal
  - Your papers' citations are more important
    - h-index, i10-index
      - Google Scholar Citations (h-index is 15 and i10-index is 33)
    - ResearchGate
    - DBLP

# Important notes for preparing and submitting a paper

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- Deciding submission types
- Following author's guidelines
- Writing proper Abstract
- Writing manuscript in good manner
- Analyzing data and discussing results properly
- Having clear contributions, limitations, and future directions
- Submitting your manuscript

# Deciding submission types (Journal)

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- Regular research article
  - **Mature and complete** research should have
    - clear research motivation, research background, research model, hypotheses, design, implementation, evaluation/assessment/pilot/experiment, findings and discussions, and future visions.
    - Quantitative research
    - Qualitative research
  - Literature review
    - in-depth and comprehensive** literature reviews
    - systematic review
    - qualitative overviews
    - quantitative review
    - meta-analysis
- Special Issue article
- Research in Progress articles
- Book review article

# Deciding submission types (Conference)

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- Full Paper
  - **Complete enough** research
    - Pilot
    - Complete experiment
  - Systematic literature review
- Short Paper (work in progress outcome)
  - Algorithm design
  - System and/or tool implementation
  - Questionnaire design
- Poster Paper
  - Conceptual and Idea
  - Architecture and Framework
  - System and/or tool
- Workshop Paper
  - Algorithm design
  - System and/or tool implementation
  - Evaluation Plan
  - Questionnaire design

# Following author's guidelines

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- ❑ Taking a look at published papers of the particular journal/conf
- ❑ Reading the author's guidelines carefully
- ❑ Making sure that the length of your manuscript is okay
- ❑ Formatting your manuscript with correct styles and settings
- ❑ If there is Microsoft Word Template
  - preparing your manuscript directly on the template
  - replacing the headings, captions, and figures
  - copying and pasting tables and changing the contents
  - pasting text-only into the template (avoid original formats)
- ❑ Watching for reference styles and in-text citation styles

# Writing proper Abstract

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- Research motivation (current situation and problems)
- What is the research goal?
- How/What this research does?
- How the effectiveness of this research's outcome is assessed?
- What are the most important findings?
  
- Should have **NO in-text citation!**
- Should **NOT** be **repeated wordings** in the rest of the manuscript
  - same rule for any part of the manuscript
  
- Having proper keywords are important!
  - can help research find your manuscripts → more citations



# Writing manuscript in good manner

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- Making sure what spelling and grammar the journal asks for
  - American English (US English)
  - British English
- Writing your manuscript in good English with helps of
  - professional translation personnel
    - Native speaker doesn't mean he or she is a good writer!
  - copyediting and language editing/polishing services
    - edanz - <http://www.edanzediting.com/> (Springer, BioMed Central)
    - SPi - <http://www.spipublisherservices.com/> (IEEE)
    - American Journal Experts - <http://www.aje.com/> (ACM)
    - Elsevier - <http://webshop.elsevier.com/languageservices/>
  - colleagues who teach English or in English speaking countries
    - via collaborations
- Having full words and explanation for any acronyms before further use them
- References should be listed in clear, detailed, accurate, consistent style; missing and incorrect references will hurt
- Avoid plagiarism and self-plagiarism
  - Turnitin, iThenticate, Anti-Plagiarism (<http://ikc2.tup.km.ua>), Plagiarisma.Net, etc.

# Analyzing data and discussing results properly

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- ❑ How data has been collected (pilot/experiment design)?
- ❑ What hypotheses and research questions are going to answer?
- ❑ Quantitative and Qualitative data analysis
  - the details of the software you are using to analyze data
    - ❑ SAS University Edition (free for teachers and students)
  - assessing validity and reliability of the data
  - proper coding methods
  - clearly explain why and how an approach is chosen
  - details of analysis results
- ❑ Causal relations analysis (Causal modeling)
  - path analysis and structural equation modelling (SEM)
  - the use of R (<http://www.r-project.org/>) and SmartPLS (free for students)
  - the use of TETRAD (<http://www.phil.cmu.edu/projects/tetrad/>)
- ❑ Summary of findings
- ❑ Discussion of findings
  - appropriate literature to support your findings and arguments are needed
  - rationales and possible reasons caused you to have the findings are needed

# Having clear contributions, limitations, and future directions

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- ❑ What are the research questions and issues this research is trying to answer and solve?
- ❑ What this research has done?
- ❑ What are the most important and unexpected findings you got at the end of this research? And why you got them from your point of view?
- ❑ What audience can benefit from this research's results?
  - different user groups, industry, government, the world
- ❑ What limitations, restrictions, and flaws this research has?
  - how you plan to resolve these?
- ❑ What are the possible follow-up tasks and research?

# Submitting your manuscript

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- ❑ **Never** submit your manuscript to two venues at the same time
- ❑ **Never** submit incomplete manuscript to a journal
- ❑ **Make sure** that your **co-author(s) is/are aware** of the submission
- ❑ **Be patient and WAIT** for the decision
- ❑ **Revise** your manuscript **according to** reviewer comments
- ❑ **Have** clear revision report
  - **list** all reviewer comments
  - **explain** your response to the comment in the revision
  - **point out** how and where the correspondent revision is
- ❑ **Meet** the deadlines
- ❑ **Prepare ALL** requested materials
  - making sure that you have copyrights for the figures you used

# Conclusion

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- Any high quality academic journal/conference has its policy and workflow
  - waiting for three to four months for a journal paper review result is common
  - getting your journal papers published may take 10~12 to 18 months
  - do NOT always stick with same journal unless it is the only journal having the scope that your paper's topic falls into
  - DO STICK with same conference every year if you can
- Negative reviews could help you improve your research
  - do NOT argue with reviewers and editors for the decision
  - can ask for more details of reviewer comments (if you really think it is necessary)
- Publishing queue (for journal)
  - acceptance date, topics, submission date
- Rejection doesn't mean everything! And it is not the end of the world either!
  - you probably submit your manuscript to wrong conference or journal
  - your manuscript needs to be further enhanced/enriched
  - revision according to reviewer comments
  - re-submit the revision to the same venue or other venues based on their guidelines
- Publisher copyright policies and self-archiving
  - <http://www.sherpa.ac.uk/romeo/>
- Your manuscript is rejected due to many reasons (usually NOT related to your research AT ALL)

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# Any Questions?

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PSN: contact me only because I forget :p

WoW: Maiga (holy priest) at Eldre'Thalas realm (an U.S. Server)