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| **Byoung-gyu Gong****Assistant Professor (Lecturer)**Operation and Information SystemsDavid Eccles School of Business University of UtahSalt Lake City, Utah 84112**Program Lead**Business DepartmentUniversity of Utah Asia CampusData Analytics Showcase: [https://gongedunet.netlify.app](https://gongedunet.netlify.app/)  |
| EDUCATION | **PH.D., EDUCATIONAL POLICY AND EVALUATION, MAY 2021**Mary Lou Fulton Teachers College, Arizona State University**M.A., GLOBAL EDUCATION COOPERATION, FEBRUARY 2015**School of Education, Seoul National University**B.A., ENGLISH EDUCATION, FEBRUARY 2011**Teachers college, Hankuk University of Foreign Studies |
| PUBLICATIONS | **\***Indicates first author**JOURNAL ARTICLES (PEER-REVIEWED)**[J.3] Lee, T. Y., Lee, S. S., **Gong, B.**, & Kwon, J. S. (2022). Research Trends in Individuals at High Risk for Psychosis: A Bibliometric Analysis. Frontiers in Psychiatry, 737.[J.2] **Gong, B**.\*, Collins, C., & Amrein-Beardsley, A. (2022). An International Professional Development Collaboration: Supporting Teachers in the Kingdom of Saudi Arabia through an Immersion Program in the United States. Gulf Education and Social Policy Review (GESPR), 115-143.[J.1] **Gong, B**.\*, Zheng, Y. (2021). More is not always better: A study of country-level factors associated with adolescents’ environmental attitudes using a multilevel analysis of PISA 2006. *Education Policy Analysis Archive*.**MANUSCRIPT IN PREPARATION**[MP.2] Gong, B. (in progress). Impact of internet and computer technology (ICT) on the students' learning achievement: Bayesian multiple regression analysis. Will be submitted to *Computers & Education*.[MP.1] **Gong, B.** (in progress). Characterizing educational vision through text mining and topic modeling of schools’ mission statements: Case of Arizona and California schools. Will be submitted to *Educational Administration Quarterly*. |

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|  | **CONFERENCE PRESENTATIONS**[C.3] **Gong, B**. (2020, May). We are all machines: Reconsidering education in the rise of the new machine era. Paper presented for presentation at the Annual Meeting of the Comparative & International Education Society (CIES), Miami, FL.[C.2] Yi Zheng **& Gong, B**. (2020, April). Applying data science to educational and psychological measurement. Paper presentation at the WIDS Conference, Tucson, AZ.[C.1] **Gong, B**.\*, Collins, C., Amrein-Beardsley, A., & Khan, R. (2020, May). A program evaluation of an international collaboration to better train, support, and prepare teachers in Saudi Arabia. Paper presentation at the Annual Meeting of the Comparative & International Education Society (CIES), Miami, FL.**ESSAYS AND BLOGS**[E.5] **Gong, B.** (2021, March 2). Learning Analytics: Is underrepresented students group performing well? *Byoung-gyu Gong.* <https://gongedunet.netlify.app/post/learning-analytics-multiple-regression-analysis/>[E.4] **Gong, B.** (2020, December 10). Analyzing nested data: Comparing multiple approaches. *Byoung-gyu Gong.* [https://gongedunet.netlify.app/post/nested-](https://gongedunet.netlify.app/post/nested-data/analyzing-nested-data-comparing-multiple-approaches/) [data/analyzing-nested-data-comparing-multiple-approaches/](https://gongedunet.netlify.app/post/nested-data/analyzing-nested-data-comparing-multiple-approaches/)[E.3] **Gong, B.** (2020, October 10). Why is PISA difficult to analyze. *Byoung-gyu Gong.* [https://gongedunet.netlify.app/post/why-pisa-is-difficult-to-analyze/why-is-the-pisa-](https://gongedunet.netlify.app/post/why-pisa-is-difficult-to-analyze/why-is-the-pisa-data-hard-to-analyze/) [data-hard-to-analyze](https://gongedunet.netlify.app/post/why-pisa-is-difficult-to-analyze/why-is-the-pisa-data-hard-to-analyze/)[E.2] **Gong, B.** (2020, October 4). Student contact network at school: Spread of the virus. *Byoung-gyu Gong.* [https://gongedunet.netlify.app/post/aspb/network](https://gongedunet.netlify.app/post/aspb/network/)[E.1] **Gong, B.** (2020, October 3). Temporal network simulation: Albert-Barabasi model. *Byoung-gyu Gong*. [https://gongedunet.netlify.app/post/temporal-network-](https://gongedunet.netlify.app/post/temporal-network-simulation-albert-barabasi-model) [simulation-albert-barabasi-model](https://gongedunet.netlify.app/post/temporal-network-simulation-albert-barabasi-model) |
| TEACHING EXPERIENCE | **University of Utah Asia Campus****January 2023 - Present**BCOR 2020 – 301 Frameworks For Business Problems1BCOR 2030 – 301 Frameworks For Business Problems2BUS 2010 – 301 Introduction to Business EconomicsIS 4410 – 301 Introduction to Information Systems**Korean Council For University College Education****January 2024**Introduction to Statistical Analysis Using IBM SPSS**Korean Chamber of Commerce and Industry(KCCI)****August 2023**Introduction to Python Coding |

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| SERVICES | **ADVANCED STATISTICS & MACHINE LEARNING*** Multiple regression & Multilevel modeling [J.1]
* Factor analysis, including Principal Component Analysis (PCA)
* Experimental research [C.1] [J.2]
* Bayesian statistical analysis [MP.2]
 |
|  | **NETWORK ANALYSIS** [W.1] [MP.3] |
|  | * Measuring the structural distance between documents
* Measuring network features of centrality, diameter, and homophily
* Extracting hot topics and cold topics in a time series text network
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|  | **TEXT MINING** [MP.1] [C.3] |
|  | * Web scraping: Collecting web-based large text data
* Topic modeling: Latent Dirichlet Allocation (LDA) modeling
* Word embedding: Word2Vec, Text2Vec
* Natural language processing: Descriptive statistics of big text data
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|  | **SOFTWARE TOOLS** |
|  | * R program (advanced)
* Python (advanced)
* Gephi (advanced)
* SPSS (advanced)
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|  | **LANGUAGE*** Korean (fluent)
* English (fluent)
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| PROFESSIONAL EXPERIENCE | **DATA SCIENTIST**Sorenson Impact Center, University of Utah, *June 2021 – December 2022*Sorenson Impact Center is a research and do institution creating social impact through data-driven impact investing and business decision-making. The data team in the center focuses on developing data infrastructure and modeling systems that can support data-driven decision-making in impact investing projects. I have been in the lead of the following tasks at the center as a data scientist:* Data Engineering (Backend)

− Build data pipelines through data scraping and API channeling− Build and maintain data dictionary− Data cleaning and feature engineering− Quality control of the database* Data Modeling

− Exploratory data analysis (EDA)− Predictive modeling− Unsupervised machine learning− Indicator creation* Data Engineering (Frontend)

− Build a production-ready data dashboard with a variety of interactive charts and automated functions− Automatic chart and report creation**RESEARCH ASSISTANT**Mary Lou Fulton Teachers College, Arizona State University, *August 2016 – May 2021** Machine learning analysis of the OECD international student assessment data
* Program evaluation of the educational programs

**RESEARCH ASSISTANT**Korea Research Institute of Vocational Education and Training (KRIVET),*April 2013 – June 2016** Designed standard curriculum of the technical colleges

**RESEARCH ASSISTANT**Korea Educational Development Institute (KEDI), *October 2011 – July 2012** Planned national strategy for educational policy
 |
| SERVICE | **CONFERENCE PROGRAM COMMITTEE****Conference of the Comparative and International Education Society 2020 (CIES 2020)***July 2019 – August 2020*Site URL: <https://cies2020.org/> |

# VOLUNTEER

**Conference of Learning Analytics,** *March 2019*

Site URL: <https://lak19.solaresearch.org/>

# SECTION EDITOR

**Current Issues of Education (CIE),** *August 2018 - May 2019*

Site URL: <https://cie.asu.edu/ojs/index.php/cieatasu>

# PLANNING AND SUPPORT COMMITTEE

**Symposium on Global Learning Metrics,** *Fall 2016, 2018*

Site URL: [https://education.asu.edu/faculty-and-research/centers-and-more/casge-](https://education.asu.edu/faculty-and-research/centers-and-more/casge-home/global-learning-metrics) [home/global-learning-metrics](https://education.asu.edu/faculty-and-research/centers-and-more/casge-home/global-learning-metrics)