

Data Science Curriculum: An analysis of LIS schools and iSchools in North America

Kayla O’Leary^a, Jeonghyun Kim^b, Abebe Rorissa^a

^a University of Tennessee, Knoxville, Knoxville, Tennessee, USA

^b University of North Texas, Denton, Texas, USA

koleary4@vols.utk.edu, Jeonghyun.Kim@unt.edu, arorissa@utk.edu

ABSTRACT

With an increase in technology use and rapid generation of information and data, graduate-level programs with data science curricula have grown exponentially to match the demand for information professionals with data-related skills. However, a gap has formed between skills learned in school and skills information professionals need post-graduation. Previous research indicates a skills gap among data scientists who lack LIS training in areas like data curation, preservation, etc., which data science programs should address (Ortiz-Repiso et al., 2018). This study, as part of a broader project funded by IMLS (Grant # RE-250066-OLS-21), attempts to address current and future workforce demands in data librarianship and analytics, employer skill demand, and acquisition of skills. This poster reports on part of the larger project - content analysis of 294 distinct graduate program curricula involving significant data science coursework in 43 LIS schools and iSchools across North America. After collecting over 1,000 data science/librarianship-related courses from institutional websites, we coded them into seven categories using their titles and descriptions. Data analysis, curation, governance, and discovery were the most popular subjects, followed by data professions, miscellaneous courses, and data assessment. In conjunction with job ad analysis and surveys of stakeholders in data science and librarianship education by others, our study could serve as input for graduate programs/curricula design. Results from our study will increase understanding of the nature and structure of data science curricula in iSchools and LIS departments while giving students requisite skills to meet future needs as data science professionals/data librarians.

REFERENCES

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ALISE RESEARCH TAXONOMY TOPICS

Education programs/schools; Curriculum; Students; Standards

AUTHOR KEYWORDS

Data Science; Graduate Education; Content analysis.

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