

# Interdisciplinary Postdoctoral Position in Generative AI in Business Digital Business Institute @ Questrom School of Business with Computing & Data Sciences

The Digital Business Institute (DBI) at Questrom School of Business in conjunction with Computing & Data Sciences at Boston University is seeking an interdisciplinary postdoctoral researcher to support a research program around the applications and consequences of generative AI in business. We are accepting applications on a rolling basis until the position is filled with flexible starting date (e.g., Jan 2023 or June 2023).

## **Project Description**

Generative algorithms are increasingly penetrating different aspects of business. Examples include the use of neural language models to synthesize website content for the purposes of search engine optimization, the synthesis of personalized product reviews, and the application of GANs, VAEs, Diffusion models to augment the creative design process. Due to the complex and black box nature of many algorithms, and the lack of empirical studies on field usage, several questions are beginning to emerge, including but not limited to: what are the potential preference-shifting impacts of these technologies on consumers? What are the long-term impacts of these technologies on platforms? What sorts of feedback loops and changes in market equilibria might we expect following the broad adoption of generative technologies in different industries? The postdoctoral researcher will drive a research program addressing such questions, employing a variety of methods, including simulation and experimentation. The postdoctoral researcher will also be expected to engage with local industry on these topics.

#### Qualifications

- PhD in Computer Science, HCI, Statistics, Data Science, Business Analytics, Information Systems Management, or a closely related field.
- Mastery of machine learning, deep learning, neural language models, generative models, such as VAEs, GANs, Flow-based models, diffusion models.
- Solid knowledge of causal inference techniques.
- Experience in the design lab experiments and familiarity with Amazon Mechanical Turk / Prolific.

#### Position Details & How to Apply

The contract for this position will be for a period of 1 year with flexible starting date with a possibility of 1-2 year extension, based on available funding. Interested candidates are encouraged to send application materials to Dokyun "DK" Lee (<a href="dokyun@bu.edu">dokyun@bu.edu</a>) and Gordon Burtch (<a href="gburtch@bu.edu">gburtch@bu.edu</a>). Please include the following:

- 1. Cover letter stating interest and qualifications
- 2. CV
- 3. One example of research or code related to generative algorithms

Applications will be reviewed on a rolling basis until the position is filled. Anticipated salary will be in the range of \$55,000 to \$60,000.

### Responsibilities

Undertaking research as described above, with an intention to publish in top business journals and CS conferences. Additionally, equal importance will be assigned to grant proposal writing, sponsored funding, and data acquisition from corporate partners. The postdoctoral scholar will closely work with Dokyun Lee, Gordon Burtch, and Peter Howard (Executive Director of DBI - pjhoward@bu.edu) in this position.

#### About the Questrom School of Business & Digital Business Institute

The Questrom School of Business at Boston University has recently focused on establishing a research community with a robust focus on analytics and data science for business. At the nexus of people & technology is the Digital Business Institute—an incubator dedicated to the advancement of practical, relevant, and human-centric research that accelerates value-creating digital transformation. We are an equal opportunity employer and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability status, protected veteran status, or any other characteristic protected by law. We are a VEVRAA Federal Contractor.