


Anthony Schmidt, Ph.D

Data Science and Applied Research

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 [acircleda](https://github.com/acircleda)

Curriculum Vitae
November 2023

Passionate data scientist adept at using Snowflake, SQL, and dbt for data lifecycle management. Skilled in leveraging R and Python for statistical analysis and psychometrics. Proficient in data communication through visualizations, dashboards, and reports.

Education

2022	PhD, Educational Psychology and Research University of Tennessee, Knoxville <ul style="list-style-type: none">• Concentration: Evaluation, Statistics, and Methodology• Minor: Statistics and Data Science• Dissertation: Science Education to the Rescue? Assessing the Relationship Between Scientific Literacy and Carbon Emissions	Knoxville, TN
2011	MSEd, Language, Literacy, and Cultural Education Indiana University, Bloomington <ul style="list-style-type: none">• Concentration: TESOL	Bloomington, IN
2006	BA, Anthropology University of South Florida	Tampa, FL

Professional Appointments

2021-present	Senior Data Scientist Amplify - Remote/Brooklyn, NY <ul style="list-style-type: none">• Developed and deployed machine learning model in R and python to provide ongoing insights to teachers regarding students' math abilities• Built data pipelines in dbt to deliver insights into usage and performance from our Math products• Collaborated with cross-functional teams to shape, surface, and analyze data for a pilot assessment product• Developed functions for our internal R package for efficient data access and data visualizations• Automated the generation of psychometric reports to help curriculum team spot difficult or incorrectly scored items and revise them• Received Hackathon award for creating a Shiny app to easily view daily activities of teachers on our platform
2019-2021	Data Visualization Researcher College and University Professional Association for Human Resources (CUPA-HR) - Knoxville, TN <ul style="list-style-type: none">• Developed static visualizations, web-based interactive graphics, and dashboards using R, Tableau, and Illustrator• Collected, wrangled, and cleaned large data sets and survey data using R• Merged in-house data with external data such as IPEDS, IPUMS, BLS• Developed surveys using research-based best practices• Analyzed cross-sectional and longitudinal data using descriptive and inferential statistics in R• Lead workshops to train members on internal data tools, visualization practices

2014-2019

Teaching Associate

English Language Institute, University of Tennessee - Knoxville, TN

- **Taught** English to international students
- Conducted **program evaluation** via modeling of international student GPAs
- **Tracked** student achievement (TOEFL) scores for use in proposals and reports
- Produced student enrollment **dashboards**
- Co-developed and co-facilitated **workshops** for university faculty and graduate students on teaching international students

Software**Schmidt, A.** (in progress). *tidyctt* [R package].Janda, K., Gamble, H., Lama, T., Crane, S., **Schmidt, A.** (2023). *amplifyR* [Internal R package].Rocconi, L. & **Schmidt, A.** (2022). *mlmhelpR* [R package]. <https://cran.r-project.org/web/packages/mlmhelpR/index.html>**Schmidt, A.** & Kulma, K. (2020). *footprint: Calculate air travel emissions* [R package]. <https://cran.r-project.org/web/packages/footprint/index.html>**Selected Publications and Presentations****Schmidt, A.** (2022). University air travel and greenhouse gas mitigation: an analysis of higher education climate policies *International Journal of Sustainability in Higher Education*. <https://www.emerald.com/insight/content/doi/10.1108/IJSHE-07-2021-0318/full/html?skipTracking=true>**Schmidt, A.** (2022, February). *The representation of women and racial/ethnic minorities in the workforce of minority-serving higher education institutions* [Research report]. CUPA-HR. <https://www.cupahr.org/surveys/research-briefs/women-minorities-msi-workforce-february-2022/>**Schmidt, A.** (2021). *Comparing intensive English program (IEP) and directly-admitted international students' academic achievement*. EdArXiv. <https://doi.org/10.35542/osf.io/vm37t>**Schmidt, A.** (2020). Are international students getting a bang for their buck? The relationship between expenditures and international student graduation rates. *Journal of International Students*. 10(3). 10.32674/jis.v10i3.1279**Skills**

Languages	R, SQL, Python
Infrastructure	Git/Github, Snowflake, dbt, AWS
Data Visualization	R, Shiny, Tableau, Looker, Figma, Illustrator
Statistical Skills	Real-World Experience: Gaussian and non-gaussian regression modeling, MLM, machine learning, outlier analysis, logistic knowledge tracing, CFA, CTT, IRT, survey weighting, multiple imputation
	Training In: SEM, propensity score matching, causal inference, MLOps
Other Computer Languages	HTML, CSS, Javascript (basic)
Other Software	SPSS, Audacity, TinkerCAD
Natural Languages	English (native), French (intermediate), Korean (basic)
Other Skills	R Package Development, Agile, Notion

NotesThis CV is reproducible. All the source code behind this CV is available on [my Github repo](#).