

LOIZOS BITSIKOKOS

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EDUCATION

Purdue University, West Lafayette, IN, USA

PhD, Communication; Expected August 2029

Concentrations: Media, Technology, and Society, Organizational Communication

Advisor: Prof. Jeremy Foote

University of Chicago, Chicago, IL, USA

MA, Computational Social Science; June 2024

Concentration: Sociology

Thesis: "Decoding Desire: A Multimodal Study of Adult Video Content and Algorithms"

Advisors: Prof. Michael Rossi, Dr. Pedro Alberto Arroyo

National Technical University of Athens, Athens, Greece

MSc, Mathematical Modelling in Modern Technologies & Financial Engineering; February 2022

Concentration: Mathematics of Data Science

Thesis: "User influence studies in online social networks"

Advisor: Prof. John Coletsos

BSc/Integrated Master's in Applied Mathematics and Physics; November 2018 Concentrations: Nuclear & Particle Physics and Theoretical & Computational Physics

Thesis: "Electron Cloud Computational Studies" Advisor: Prof. Konstantinos Anagnostopoulos

PUBLICATIONS

Clipperton, J., & **Bitsikokos**, **L.** (2025). You do not get to tell me about sad: Swiftian Saudade in Taylor Swift's lyrics. Psychology of Aesthetics, Creativity, and the Arts. Advance online publication. https://dx.doi.org/10.1037/aca0000810

Sawicki, J., **Bitsikokos**, **L.**, Belinskaya, Y., Ganzha, M., & Paprzycki, M. (2025). Leveraging Network Analysis and NLP for Intelligent Data Mining of Taxonomies and Folksonomies of PornHub. Applied Sciences, 15(17), 9250. https://doi.org/10.3390/app15179250

PUBLICATIONS UNDER REVIEW

Bitsikokos, L. (2025). From Tokens to Meaning: A Computational Grounded Theory Analysis of Porn Video Categories [Manuscript submitted for publication, under review].

Foote, J., Kumar, D., Jha, B., Funkhouser, R., **Bitsikokos**, L., Goel, H., and Hsuen-Chi C. (2025). Taming toxic talk: Using chatbots to intervene with users posting toxic comments [Manuscript submitted for publication, under review].

Foote, J., Kumar, D., Goel, H., **Bitsikokos**, L. (2025). *Running Reddit Experiments with* Conversational AI Agents [Manuscript invited for publication in Special Issue, under review]

Bitsikokos, L. (2025). Connected to the Grid: Extending Baudrillard's Simulacra and Simulation to Online Media Platforms [Manuscript submitted for publication, under review].

CONFERENCE PRESENTATIONS

Bitsikokos, L. and Stolzenberg, R.M. (2025, June). Mapping Justice: A Social Network Analysis of U.S. District Court Citations [Conference presentation]. International Network for Social Network Analysis Sunbelt, Paris, France.

Akom, M., Sawyer, H., **Bitsikokos**, L., Reed, A. L., Ojike, F. C., Ofori Boateng, P., Nwoko, O. B., Mohammed, I. and Lee, S. (2025, June). GIFTS: Welcome Aboard: Simulating an Outsider-Within's Organizational Assimilation and Socialization through Role-Play [Conference presentation]. Annual International Communication Association (ICA) Conference, Denver, Colorado, USA.

Clipperton, J. and **Bitsikokos**, L. (2025, April). You don't get to tell me about sad: Swiftian Saudade in Taylor Swift's lyrics [Conference presentation]. 82nd Annual Midwest Political Science Association Conference, Chicago, Illinois, USA.

Clipperton, J. and **Bitsikokos**, L. (2025, April). You don't get to tell me about sad: Swiftian Saudade in Taylor Swift's lyrics [Conference presentation]. CGSA Conference, West Lafayette, Indiana, USA.

Bitsikokos, L. (2024, May 30). Living in the Hub: A Platform Study of Desire Semantics [Conference session]. 9th UChicago Interdisciplinary MA Research Conference, Chicago, IL, United States.

Bitsikokos, L. (2023, November 30). Decoding Desire: Assessing Bias in Algorithmic Adult Video Recommendations [Conference session]. Computational Social Science Workshop at The University of Chicago, Chicago, IL, United States.

Bitsikokos, L., Papst, F., Schueller, W. (2022, June 9-10). *Brief Analysis of the Rust Ecosystem* [Conference session]. CEU-CSH Meeting. Vienna, Austria.

Bitsikokos, L., ladarola, G., Sabato, L. (2018). Secondary electron emission models in e-cloud buildup simulations: from lab to the code. [Paper presentation] ECLOUD 18 Conference, Isola D'Elba, Italy.

POSTER PRESENTATIONS

Bitsikokos, L. and Stolzenberg, R.M. (2025, September). The Citational Network Structure of U.S. District Court Documents [Poster presentation]. Organizational Communication Mini Conference (OCMC), Urbana, Illinois, USA.

Hossner, F., Bindas, A., Krisdianatha, A., Tarannum, A., Smrke, J., **Bitsikokos, L.**, & Aversa, E. (2025). *The Algorithmic Mirror: Auditing TikTok Recommender Systems for Personalization, Protection, and Profiling* [Poster Presentation]. Digital Methods Summer School 2025, Amsterdam, Netherlands.

Bitsikokos, L. and Stolzenberg, R.M. (2025, June). Mapping Justice: Data Collection on U.S. District Court Citational Networks [Poster presentation]. International School and Conference on Network Science (NetSci), Maastricht, Netherlands.

Bitsikokos, L. and Helbing, J. (2025, April). Meaning Orthogonality in Embedding Spaces: A Geometric Approach [Poster presentation]. Purdue College of Liberal Arts Research Showcase, West Lafayette, Indiana, USA.

RESEARCH IN PROGRESS

Bitsikokos, L. and Helbing, J. (2025). Meaning Orthogonality in Embedding Spaces: A Geometric Approach [Manuscript in preparation]

Akom, M., Sawyer, H., **Bitsikokos**, L., Reed, A. L., Ojike, F. C., Ofori Boateng, P., Nwoko, O. B., Mohammed, I. and Lee, S. (2025). Welcome Aboard: Simulating an Outsider-Within's Organizational Assimilation and Socialization through Role-Play [Manuscript in preparation].

PROJECT REPORTS

Hossner, F., Bindas, A., Krisdianatha, A., Tarannum, A., Smrke, J., **Bitsikokos, L.**, & Aversa, E. (2025). *The Algorithmic Mirror: Auditing TikTok Recommender Systems for Personalization, Protection, and Profiling* [Project report]. Digital Methods Initiative. Retrieved from

https://www.digitalmethods.net/Dmi/SummerSchool2025AlgorithmicMirror

RESEARCH EXPERIENCE

Brian Lamb School of Communication, West Lafayette, IN

<u>Data Scientist</u>, <u>Aug 2024 – Present</u>

Assisting **Prof. Jeremy Foote** and **Prof. Deepak Kumar** (UCSD) with the data analysis aspect of the **Toxic Talk Project** a study aimed at assessing the efficacy of Al agents in reducing toxic discourse online

Division of the Social Sciences, University of Chicago, Chicago, IL

Graduate Research Assistant, Sept 2023 – June 2024

- Assisted Prof. Ross Stolzenberg in research around mechanisms of acquiring power and authority in the US district court judiciary through studying citational links in a large-scale corpus of legal documents
- Data collection and pre-processing of legal documents (court decisions)
- Conducted network analysis studies of social and citation networks using Python, Gephi, and legal citation analysis tools

Graduate Research Assistant, Sept 2023 – Jun 2024

- Assisted Prof. Jean Clipperton in the data collection, record linkage, and sentiment analysis
 of a dataset of Taylor Swift's lyrics targeted around her artistic and personal narrative.
- Administrative assistance updating the program's website content, copywriting, and reviews.
- Research assistance (literature reviews, data collection, research design, methodology) with an agent-based modeling project around housing inequality

Graduate Research Assistant (Environmental Neuroscience Lab), March 2023 – Sept 2023

- Project: Contagion of emotional sentiment in urban environments
- Developed a large-scale computing model of sentiment contagion for cities using a Big-Data database (Postgres) of geolocated tweets in Python (NumPy, pandas, requests, matplotlib, seaborn, bs4, psycopg2).

Complexity Science Hub Vienna, Vienna, Austria

Visiting Student Intern / Researcher, June 2022 – July 2022

- Project: Complexity in Open-Source Software Ecosystems
- Assisted **Dr. William Schueller** with the development of a GitHub data acquisition repository in Python for Rust programming language.
- Supported project investigating the impact of a weekly newsletter featuring a Rust repository on the acquired GitHub social network metrics (e.g., stars, forks, downloads).

National Technical University of Athens, Athens, Greece

Graduate Researcher, Master's Thesis, September 2021 – February 2022

- Examined user influence in online social networks (Twitter); Completed extensive literature review.
- Analyzed open-source data set using Network Analysis including Twitter specific and traditional centrality measures, PageRank-based algorithms, Python (NetworkX, NumPy, Pandas, Matplotlib, Seaborn).
- Conducted correlation studies.
- Authored 100+ page manuscript, "Studies of User Influence in Online Social Networks (ONS)".

European Organization for Nuclear Research (CERN), Geneva, Switzerland

<u>Researcher / Technical Student, September 2017 – September 2018</u>

- Studied Electron Cloud phenomena for Large Hadron Collider (LHC) using the PyECLOUD simulation code.
- Collaborated with BE-Hadron Synchrotron Collective Effects, Electron Cloud, & Heat Load Task Force.
- Attended weekly meetings and presented research progress.
- Participated in trainings, workshops, and courses.

TEACHING EXPERIENCE

University of Chicago, Chicago, IL

Teaching Assistant, Social Network Analysis, Spring 2024

 Served as a TA for the social network analysis class taught by Prof. Sabrina Nardin; developed class materials, graded assignments, advised students on coursework, and provided support.

Teaching Assistant, Foundations for Statistical Theory, Fall 2023

• Served as a TA for the statistics class taught by Prof. Yanyan Sheng; graded assignments, advised students on coursework, and provided support.

Teaching Assistant, Computing for the Social Sciences, Fall 2023

 Served as a TA for Prof. Sabrina Nardin's computing class for social scientists; graded assignments and provided support.

Teaching Assistant, Computational Math Camp, August 2023

 Served as a TA for the MACSS Math Camp taught by Prof. Jean Clipperton; graded assignments, advised students on coursework, and provided support.

Teaching Assistant, Computing for the Social Sciences, June 2023

• Served as a TA for Prof. Jean Clipperton's Computing for the Social Sciences course; graded assignments, advised students on coursework, and provided support.

Two Pi Rho Tutoring and Self-Employed, Athens, Greece

Physics and Math Instructor, September 2018 – September 2019

• Taught physics, math, and calculus to a group of ten high school students.

AWARDS, FELLOWSHIPS & SCHOLARSHIPS

PROMISE Award for 2024-2025

College of Liberal Arts Dean's Graduate Fellowship for 2024 – 2030

Onassis Foundation Scholarship for 2024 – 2027

The University of Chicago Tuition Scholarship for 2023 – 2024

Onassis Foundation Scholarship for 2023 – 2024

International House Fellowship for 2023 – 2024

Phoenix Research Scholarship for 2022 – 2023

Social Sciences Opportunity Scholarship for 2022 – 2023

MA Program Research Scholarship for 2022 – 2023

Limmat Stiftung Award for graduating 4th out of 93 students for 2018 – 2019

ADDITIONAL TRAINING

Digital Methods Initiative Summer School - Social media at a crossroads and AI platform sensitivity, University of Amsterdam, Netherlands $July\ 2025$

The AI Con: How to Fight Big Tech's Hype and Create the Future We Want - workshop and talk by Dr. Alex Hanna, West Lafayette, IN, USA

April 2025

Systems and Disruptions Purdue Undergraduate Philosophy Conference, West Lafayette, IN, USA March 2025

Organizational Communication Mini Conference (OCMC), Evanston, IL, USA Sept 2024

Frontiers in Online Community Research Symposium, Purdue University, West Lafayette, IN, USA Sept 2024

Political Theory Summer School, Institute for the Radical Imagination, Kasos, Greece $July\ 2022$

Extra-terrestrial Ethnographies of the Future-Present, The Stavros Niarchos Foundation Public Humanities Initiative, Athens, Greece (Ethnography seminar organized by Columbia University, University of Thessaly, and Athens Zine Bibliotheque)

November 2020

CERN Inverted School of Computing, Geneva, Switzerland

March 2018

Joint Universities Accelerator School (JUAS), The European Scientific Institute, Archamps, France January 2018

Education in the Era of Information Technology, Neos Pedagogos, Athens, Greece November 2015

PROFESSIONAL EXPERIENCE

Intralot Tech S.A. (multinational tech management firm)

Backend Software Engineer, January 2020 – July 2022

- Developed algorithms and probability models for sports betting; Built software for global distribution.
- Performed data analysis, parameter tuning, and evaluation for models, QA software testing, and bug fixes.
- Developed and tested cash-out algorithms and risk analysis.
- Served as a Member of an AGILE team of software engineers, mathematicians, and statisticians.

LANGUAGES

- Greek (Native)
- English (Fluent)
- German (Intermediate)
- French (Basic)

RESEARCH INTERESTS & SKILLS

- **Research Interests**: Computational Social Science, Platform Studies, Algorithms and Society, Algorithmic Bias, Media and Society, Semiotics, Organizational Communication, Theory
- **Skills**: Quantitative & Computational Methods, Data Collection, Statistical Analysis, Network Analysis, Programming, Software Engineering, Database Engineering, Project Management, Data Cleaning, Visualization, Record Linkage, Large-scale computing (AWS), Writing, Literature Reviews
- **Technical**: Python, R, Java, Mathematica, FORTRAN, MATLAB, LaTeX, Git, SQL, Minitab, Office 365, Jira, Unix
- Creative Pursuits: Jazz Saxophone (Intermediate), Poetry, Zines

REFERENCES

Available upon request