LOIZOS BITSIKOKOS

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EDUCATION

Purdue University, West Lafayette, IN, USA
PhD, Communication; Expected August 2029
Concentrations: "Organizational Communication", "Media, Technology, and Society"
Advisor: Prof. Jeremy Foote

University of Chicago, Chicago, IL, USA
MA, Computational Social Science; Expected 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

Bitsikokos, L. (2024). From Tokens to Meaning: A Semantic Analysis of Porn Video Categories Using Word Embeddings. *Manuscript submitted for publication, Porn Studies.*

Clipperton, J. and **Bitsikokos, L.** (2024). *You don't get to tell me about sad: Swiftian Saudade, meaning, and sentiment. Manuscript submitted for publication.*

CONFERENCE PRESENTATIONS

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., Iadarola, 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.

RESEARCH IN PROGRESS

Toxic Talk Project (with Prof. Jeremy Foote, Prof. Deepak Kumar, Bedadyuti Jha, Ryan Funkhouser, and Hsuen-Chi Chiu)
Digital experiment study of reducing online toxic talk discourse using conversations with AI agents as intervention

The Network Structure of US District Courts Judiciary (with Prof. Ross Stolzenberg)
Studies of the citational network of the US judiciary as revealing its power structure

You wouldn't know what I mean: words, sentiment, and valence in a Swift world (with Prof. Jean Clipperton)
Methodological study of lyric analysis on Taylor Swift's artistic trajectory advancing literature on celebrity, text analysis, and music

The Unbearable Lightness of Being on TikTok: an interplay between semiotics, ideology, and aesthetics
An interpretive and comparative study of TikTok as a medium for conveying political messages

Teaching-induced Stress among instructors(in collaboration with ASPETE)
A quantitative study of teaching-induced Stress among engineering-educator trainees

RESEARCH EXPERIENCE

Brian Lamb School of Communication, West Lafayette, IN

Data Scientist, Aug 2024 – Present

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 AI agents in reducing toxic discourse online

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

Graduate Research Assistant, Sept 2023 – Present

- Assisting **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)
- Conducting network analysis studies of social and citation networks using Python, Gephi, and legal citation analysis tools

Graduate Research Assistant, Sept 2023 – Jun 2024

- Assisting **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
- Developing 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

Researcher / Technical Student, September 2017 – September 2018

- 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

Dean's Graduate Fellowship of $438,000 for 2024 – 2030
Onassis Foundation Scholarship of $48,200 for 2024 – 2027
The University of Chicago Tuition Scholarship of $43,430 for 2023 – 2024
Onassis Foundation Scholarship of $19,400 for 2023 – 2024
International House Fellowship of $3,000 for 2023 – 2024
Phoenix Research Scholarship of $20,000 for 2022 – 2023
Social Sciences Opportunity Scholarship of $1000 for 2022 – 2023
MA Program Research Scholarship of $500 for 2022 – 2023
Limmat Stiftung Award of 1000€ for graduating 4th out of 93 students for 2018 – 2019

ADDITIONAL TRAINING

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, Organizations

- **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, Acrylic Painting & Charcoal Sketching

REFERENCES

Prof. Ross Stolzenberg r-stolzenberg@uchicago.edu 773-702-8685	Prof. Jean Clipperton clipperton@uchicago.edu	Dr. Pedro Alberto Arroyo arroyo@uchicago.edu 857-334-7166	Prof. Jeremy Foote, jdfoote@purdue.edu 765-494-0195