Jason Lucas

Data Sci. & AI Research Scientist| PIKE Research Lab

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EDUCATION

THE PENNSYLVANIA STATE UNIVERSITY
PH.D. IN INFORMATICS
Data Science and AI
GPA: 3.91
Dec 2025 | University Park, PA

ST. GEORGE'S UNIVERSITY
MASTER OF PUBLIC HEALTH
Epidemiology
GPA: 3.83
May 2021 | Grenada, WI

BOSTON UNIVERSITY
M.SC. IN COMPUTER INFO. SYS.
Health Informatics
GPA: 3.64
May 2014 | Boston, MA

ST. GEORGE'S UNIVERSITY
B.SC. IN INFORMATION TECHNOLOGY
GPA: 3.64
May 2010 | Grenada, WI

PENN STATE LINDIV
LINGUISTICS & LANGUAGE SCIENCE
Certificate
May 2025 | University Park, PA

INTEREST

Natural Language processing
Low-Resource Multilingual NLP
Adversarial Machine Learning
Adaptative and Alignment Tuning
Fake News generation & Detection
Large Language Model Hallucination

SKILLS

ARTIFICIAL INTELLIGENCE
NLP • ML • DL • LLM
DATA SCIENCES
Wrangling • Exploratory
Visualization • Analytics
Scrapping • Predictive
Modeling•
PROGRAMMING
Language:
Python • SQL •PyTorch • Java
LaTeX •
Familiar:
C++ • CSS • PHP • HTML
TRANSFERABLE
Presentation• Project Management
Training • Communication •
PLATFORM
Public Health:
Epi Info• R • GeoDa • SAS
Data Science & AI
VS Codes• Google Collab
IntelliJ • Github • Oracle • MSSQL

EXPERIENCE

THE PENNSYLVANIA STATE UNIVERSITY | GRADUATE ASSISTANT
Aug. 2021 - Present | PA, US
- Research Assistant
    - Applying novel NLP and machine learning techniques to combat dis/misinformation across languages, contexts, and distribution gaps. under **SysFake** headed by **Dr. Dongwon Lee's** stewardship.
    - Develop research direction, mentor interns, and review conference papers
    - Gained experience with Python, PyTorch, APIs (Twitter, DeepInfra, Open.AI, Transformers (Large Language models), Deep Learning, Machine Learning, Web Scrapping
- Teaching Assistant
    - Responsible for conducting office hours, managing classes, coaching students, recording attendance, grading assessment, and providing written feedback.
- NSF NRT Fellow
    - Applying transdisciplinary research to advance human-AI interaction through **LINDIV** research traineeship.

ST. GEORGE'S UNIVERSITY | FACULTY
June 2011 – July 2021 | Grenada, WI
- Instructor, Demonstrator, Adjunct Professor, Facilitator
    - Served as Head of Division & Software Administrator
    - Led teams, trained and coordinated across SimCapture/Examsoft platforms
    - Mentored interns, supported clinical didactic and examinations
    - Taught undergraduate and graduate-level courses in IT, Medicine, and Public Health
    - Innovated an Online Objective Structured Clinical Examination during COVID-19.

GOVERNMENT OF GRENADA | CERTIFIED TEACHER
Aug 2010 – Jul 2011 | Grenada, WI
- Managed Information Technology lab
- Taught Caribbean Secondary Education Certificate level Information Technology

PUBLICATIONS

[1] D. Macko, R. Moro, A. Uchendu, I. Srba, **Lucas, Jason Samuel**, M. Yamashita, N. I. Tripto, D. Lee, J. Simko, and M. Bielikova. Authorship obfuscation in multilingual machine-generated text detection. *arXiv preprint arXiv:2401.07867*, 2024.

[2] D. Macko, R. Moro, A. Uchendu, **Lucas, Jason**, M. Yamashita, M. Pikuliak, I. Srba, T. Le, D. Lee, J. Simko, and M. Bielikova. **MULTITuDE: Large-Scale Multilingual Machine-Generated Text Detection Benchmark**. In H. Bouamor, J. Pino, and K. Bali, editors, *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing*, pages 9960–9987, Singapore, Dec. 2023. **Association for Computational Linguistics**.

[3] **Lucas, Jason**, L. Cui, T. Le, and D. Lee. **Detecting False Claims in Low-Resource Regions: A Case Study of Caribbean Islands**. In T. Chakraborty, M. S. Akhtar, K. Shu, H. R. Bernard, M. Liakata, P. Nakov, and A. Srivastava, editors, *Proceedings of the Workshop on Combating Online Hostile Posts in Regional Languages during Emergency Situations*, pages 95–102, Dublin, Ireland, May 2022. **Association for Computational Linguistics**.

[4] **Lucas, Jason**, A. Uchendu, M. Yamashita, J. Lee, S. Rohatgi, and D. Lee. **Fighting Fire with Fire: The Dual Role of LLMs in Crafting and Detecting Elusive Disinformation**. In H. Bouamor, J. Pino, and K. Bali, editors, *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing*, pages 14279–14305, Singapore, Dec. 2023. **Association for Computational Linguistics**.

LINKS

SERVICE

President • Graduate Student Assc.
Outreach Coordinator • LinDiv
IT Officer • Pan-African Prof. Alliance
Volunteer • EMNLP 2023 Volunteer
Founder & Director • Fit For Life
Peer Reviewer • ACL 2024
IT Officer • Red Cross Grenada

RESEARCH PROJECT

PIKE RESEARCH LAB | PENN STATE UNIVERSITY
Led and collaborate on the following research
- **Research Project**: SysFake, SocialGPT, FCFC
- **Ph.D. Projects**: C-Transfer, F3, X-GEN, GREENLAND

FELLOWSHIP

2022-24	Linguistic Diversity Across the Lifespan, National Science Foundation.
2021-22	Funds for Excellence in Graduate Recruitment, Penn State University.
2018-20	Graduate Faculty Fellowship, St. George's University
2007-10	Undergraduate Scholarship, Government of Grenada.

AWARD

2018	Chancellor's List for Academic Excellence, MPH
2012	Excellence and Dedication to OSCE, SGU
2010	Dean's List for Academic Excellence, B.Sc
2008	Chancellor's List for Academic Excellence, B.Sc

INTERNSHIP

2024	Interaction (upcoming)
2023	Coalfire
2010	Flow Grenada (LIME: Cable & Wireless)

IT PROJECT

INFORMATION SYSTEMS PROJECTS | ST. GEORGE'S UNIVERSITY
Developed and championed the following projects

- Telemedicine Virtual Hospital:
  - I oversaw functional requirements gathering, made recommendations, piloted and tested telemedicine technology, provided training to participants, and successfully executed the go-live.
- Online Clinical Examination Exercise:
  - In response to COVID-19, I spearheaded the creation, testing, piloting, training, and deployment of the Online Clinical Evaluation Exercise (OCEX). We revamped the Objective Structured Clinical Examination process, uniquely integrating it with our in-house platforms, a first of its kind worldwide!
- B-Line Simulation Lab Expansions:
  - Managed B-Line Medical simulation lab expansion, collaborating with a diverse team and supporting the project manager.