CURRICULUM VITAE - ERIN PACQUETET

Data Scientist - SCIAM

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EDUCATION

Ph.D. in Linguistics *2024*
University at Buffalo
Dissertation: The effect of linguistic properties on typing behaviors and production processes
(Committee: Jean-Pierre Koenig, Rui Chaves, Cassandra Jacobs, Christian DiCanio)

M.S in Computational Linguistics *2021*
University at Buffalo
M.S. Project: Processing keystroke data for linguistic analysis

M.A. in English Linguistics *2018*
Université Paris Diderot
Phonetics and Phonology minor
1 year Academic Exchange at the University of Arizona
M.A. Thesis: Investigating the Hierarchy of Constituency Through Keystroke Log
(Committee: Nicolas Ballier, Benoît Crabbé)

B.A. in Anglophone Studies *2016*
Université Paris Diderot
1 semester Academic Exchange at the University of Nottingham

PUBLICATIONS

Research papers:

Proto: A Neural Cocktail for Generating Appealing Conversations - Saha, Das, Soper, **Pacquetet**, *2021*
Srihari
In 4th Proceedings of the Alexa Prize

Conference Proceedings:

Logging Keystrokes in Writing by English Learners - Velentzas, Caines, Borgo, **Pacquetet**, *2024*
Hamilton, Arnold, Nicholls, Buttery, Gaillat, Yannakoudakis, Ballier
LREC-COLING 2024

Let's Chat: Understanding User Expectations in Socialbot Interactions - Soper, **Pacquetet**, Saha, *2022*
Das, Srihari
Proceedings of the Second Workshop on Bridging Human-Computer Interaction and Natural Language Processing

Prototype de feedback visuel des productions écrites d'apprenants francophones de l'anglais sous *2019*
Moodle (*Visual feedback prototype for English learner's written productions on Moodle*)
- Ballier, Gaillat, **Pacquetet**
EIAH 2019

Investigating Keylogs as Time-Stamped Graphemes - Ballier, **Pacquetet**, Arnold *2019*
Grafematik 2018

PRESENTATIONS & POSTERS

Invited talks:

Pre-processing keystroke logs for linguistic analysis - **Pacquetet**   *2023*
Deep Learning for Language Assessment Closing Workshop - November, Paris - France

Refereed by Abstract:

Predicting CEFR levels for learners of English with keylogging metrics, an exploratory study-   *2025*
Al Sawar, **Pacquetet**, Mallart, Simpkin, Ballier
CORIA-TALN 2025, DynTAL Workshop - June, Marseille -France

Logging Keystrokes in Writing by English Learners - Velentzas, Caines, Borgo, **Pacquetet**,   *2024*
Hamilton, Arnold, Nicholls, Buttery, Gaillat, Yannakoudakis, Ballier
LREC-COLING 2024 - May, Torino - Italy

Let's Chat: Understanding User Expectations in Socialbot Interactions - Soper, **Pacquetet**,
Saha, Das, Srihari   *2022*
HCI+NLP 2022- July, Seattle, WA - USA

Using keystroke logs to analyze CMC - **Pacquetet**   *2021*
Poster - *CMC-Corpora 2021 - October, Nijmegen - Netherlands*

Prototype de feedback visuel des productions écrites d'apprenants francophones de l'anglais
sous MOODLE - Ballier, Gaillat, **Pacquetet**   *2019*
Poster - *EIAH 2019 EdTech Forum - June , Paris - France*

Investigating Keylogs as Time-Stamped Graphemes - Ballier, **Pacquetet**, Arnold   *2018*
Talk - *Grafematik June, Brest - France*

Other academic presentations:

Investigating typing bursts as a linguistic unit - **Pacquetet**   *2019*
Qualifying Paper Presentation - December, Buffalo NY - USA

French Multi-word expression and their structural differences in treebanks - **Pacquetet**   *2019*
Poster - *CSE Departmental Demo Day - May, Buffalo NY - USA*

Annotation of Multi-word expression in the French Treebank - **Pacquetet**   *2018*
Poster - *CSE Departmental Demo Day - December, Buffalo NY - USA*

Outreach:

Fiabilité dans l'ère de l'IA générative : le RAG pour gérer les hallucinations - **Pacquetet**, Jara   *2025*
Meet-up Dev, April, Paris - France

GRANTS AND AWARDS

Mark Diamond Research Fund Grant *$1995*	*2022*
Graduate student research funding *$399*	*2022*
Dept. of Linguistics, University at Buffalo.	
3rd place of Alexa Prize Socialbot Grand Challenge 4 *$50,000*	*2021*
PROTO team, Amazon	
Alexa Prize Team Research Grant *$250,000*	*2020*
PROTO team, Alexa Prize Socialbot Grand Challenge 4, Amazon	
Linguistics Fellowship Award	*2018 - 2019*
Dept. of Linguistics, University at Buffalo.	

Merit-based Five-Year Full Tuition Scholarship   *2018 - 2023*
Dept. of Linguistics, University at Buffalo.
Erasmus+ Scholarship   *2016*

WORK EXPERIENCE

Data analyst, scientist and consultant   *2022 - 2024*

IDEX project - Deep Learning for Language Assessment (DLLA)

- Collected and managed large datasets of user data.

- Designed and implemented an algorithmic ETL pipeline and an automated database processing API.

- Developed and computed key metrics for data analysis and model design.

Research assistant   *2020 - 2022*

University at Buffalo - Under the supervision of Dr. Fabiola Henri

- Developed and implemented automated scripts for data collection and categorization.

- Implemented data quality verification protocols.

- Managed a database dedicated to Creole languages.

Lead data analyst   *2020 - 2021*

Amazon Alexa Prize - Team Proto

- Helped deploy and manage the project on AWS, funded by a competitive grant ($250 000).

- Designed and implemented a linguistic model for generating chatbot responses, using advanced NLP techniques.

- Conducted in-depth, result-driven analyses, created interactive dashboard visualizations and provided feedback on a corpus of 346 554 responses.

- Developed an automatic data categorization method that optimized data management, resolving a methodological bottleneck.

- Delivered high-quality data-driven feedback that allowed for a quick product version turnaround which was highlighted as a key contributor to our team's success.

Graduate Teaching Assistant   *2018 - 2020*

University at Buffalo - Undergraduate Linguistics   *2022 - 2023*

- Developing, preparing and teaching course material

- Evaluating and grading examinations, assignments and papers

- Holding office hours

University of Arizona   *2017 - 2018*
Graduate Teaching Assistant - Undergraduate French

- Preparing and teaching course material as instructor of record

- Evaluating and grading examinations, assignments and papers

- Organizing weekly "Francophone Tables" (informal discussion and activities in French)

- Weekly Tutoring

COURSES TAUGHT

Instructor of record in Linguistics:

Roots of English   Spring 2020 - University at Buffalo

Teaching Assistant in Linguistics:

Languages of the World   Spring and Fall 2023 - University at Buffalo
Language, Society, and the Individual   Fall 2022 - University at Buffalo
Roots of English   Fall 2019 - University at Buffalo
Language in Pluralistic America   Spring 2019 - University at Buffalo
Introduction to Linguistic Analysis   Fall 2018 - University at Buffalo

Instructor of record in French:

French 102 (2 sections)   Spring 2018 - University of Arizona
French 201 (2 sections)   Fall 2017 - University of Arizona

Other relevant experiences:

ESL summer camp resource counselor   2016 & 2017

SKILLS

Programming Languages	Python, R, Perl, Javascript
Libraries	NLTK, CoreNLP, SpaCy, scikit-learn, Transformer models
	Keras, TensorFlow, Pytorch, Pandas, Numpy
Data Management and Visualization	SQL, Tableau, Power BI, Matplotlib, ggplot2, Powerpoint
Web Development	HTML, CSS, JavaScript
Tools	Jupyter Notebooks, Visual Studio, LaTeX, Git, GitHub
Human Languages	French (Native), English (Bilingual), German (B1)

ACADEMIC AND ADMINISTRATIVE SERVICE

Chief Excellence Officer - Graduate Linguistics Association, University at Buffalo	*2022-2023*
Member - Colloquium Committee, University at Buffalo	*2022-2023*
Member - Departmental Space & Resources Committee, University at Buffalo	*2021-2023*
Coordinator - Syntax and Semantics research group, University at Buffalo	*2021-2023*
Listserv manager - Graduate student listserv managing, University at Buffalo	*2021-2023*
Member - Departmental Diversity Committee, University at Buffalo	*2020-2023*
Co-author - "Addressing Institutional Racism in UB Linguistics" document	*2020*
Volunteer - Grievance committee graduate student volunteer, University at Buffalo	*2020*
Reviewer - Mark Diamond Research Fund (MDRF) grant review	*2020*
Webmaster - Graduate Linguistics Association, University at Buffalo	*2019-2022*
Chief Excellence Officer - Graduate Linguistics Association, University at Buffalo	*2018-2019*
Volunteer - Research Seminar: *Disorder : Histoire sociale des mouvements punk/post-punk*	*2015*