### Jean-Baptiste LAMARE Research Scientist | Deep Learning and NLP

in linkedin.com/in/jlamare ♀ github.com/jblamare Google Scholar ≥ Personal Website □ 412-626-8707 @ jblamare@gmail.com ♀ San Francisco, CA i French citizen, H-1B visa

#### EDUCATION CARNEGIE MELLON UNIVERSITY (CMU), SCHOOL OF COMPUTER SCIENCE - PITTSBURGH, PA 2017 - 2019 M.S., Language Technologies - Focus : Natural Language Processing, Computer Vision, Audio Processing ECOLE POLYTECHNIQUE, DEPARTMENT OF COMPUTER SCIENCE - PALAISEAU, FRANCE 2012 - 2017 M.S., Data Science - Focus : Machine Learning, Databases, Natural Language Processing B.S., Mathematics and Computer Science PROFESSIONAL EXPERIENCE ENLITIC | SENIOR RESEARCH SCIENTIST (April 2021 - Present) 2019 - PRESENT **RESEARCH SCIENTIST** (August 2019 - April 2021) San Francisco, CA • Parsed and analyzed millions of EHR and DICOM data points to extract insightful features in order to streamline the work of radiologists. • Developed self-supervised, supervised, and unsupervised NLP models for multiclass/multilabel classification, NER, and entity linking, using various architectures (transformer, BERT, RNN...) to detect over 70 abnormalities in clinical reports, extract entities, and match them to our ontology. • Implemented several NLP models and pipelines for free text report structuring, allowing the identification of sections relevant to each target feature. Trained supervised multilabel computer vision models, as well as multimodal models at the intersection of CV and NLP, to detect over 20 abnormalities in radiological images, specifically X-rays. • Designed end-to-end labeling pipelines, including interface design, case selection, and quality assurance, that would be used by over 15 experts to label more than 100,000 studies. Developed and maintained several shared repositories and python packages for deep learning model training (Keras-like), model deployment, as well as NLP pipeline creation (spaCy-like). • Led a successful blind test demonstrating model outputs on independently managed datasets for prospective clients. **GRADUATE RESEARCH ASSISTANT** CMU 2017 - 2019 • Collected and labeled a dataset of tweets during public safety events. Pittsburgh, PA

• Developed a **Deep Learning useful tweets extraction** system for public safety events to identify tweets that contain information helping the authorities respond to such crises.

# • Designed and implemented a **web interface** for users to visualize extracted tweets in real-time and provide feedback on which tweets are actually useful, feeding an active learning paradigm.

JANUARY 2018 - MAY 2018

Publications		
EMNLP 2020 Clinical NLP WS	<b>On THE DIMINISHING RETURN OF LABELING CLINICAL REPORTS</b> Jean-Baptiste Lamare, Tobi Olatunji, Li Yao	November 2020
AVSS 2018 T4S WS	Accident Forecasting in CCTV traffic camera videos Ankit Shah, Jean-Baptiste Lamare, Tuan Nguyen Anh, Alexander Hauptmann	November 2018
ICMR 2018	<b>MULTIMODAL FILTERING OF SOCIAL MEDIA FOR TEMPORAL MONITORING AND EVENT ANALYSIS</b> Po-Yao Huang, Junwei Liang, Jean-Baptiste Lamare, Alexander Hauptman	JUNE 2018

### □ Academic Projects

## Embodied Question Answering (EQA) August 2018 - December 2018

- Improved the Visual Question Answering (VQA) and navigation metrics on the EQA task.
- Worked on deep learning applied to VQA and navigation in a 3D environment in Pytorch.

### A NEURAL MUSIC CRITIC

- Created a model that automatically writes a review from the audio file of a song.
- Worked on Music Processing and Conditioned Text Generation with CNNs and LSTMs in Pytorch.

### Skills

Programming Languages	Python, Java, C++, R, SQL, HTML, Javascript, CSS
Machine Learning Frameworks	PyTorch, Tensorflow, spaCy, Stanza, Scikit-learn, Pandas, Numpy
Other Tools/Technology	Git, AWS, Elasticsearch, Mechanical Turk, Raspberry
Languages	English (fluent), French (native), German (intermediate), Spanish (beginner)

### f Miscellaneous