
Summary: PhD in computer science (May 201) now working in natural language, semantic and conceptual relativity text graphs building explainable AI graphs and ML algorithms.

Education

[University of Notre Dame](#)

May, 2018

Dissertation Title: *Generating Networks by Learning Hyperedge Replacement Grammars*

Advisor: Tim Weninger

Professional Experience

[Kyndi](#) **Cognitive Memory Lead Engineer**

San Mateo, CA (2017 –)

I work on graph engine indexing, natural language understanding, knowledge representation, concept graphs, logical reasoning, linguistic analysis, and statistical machine learning around models for text and documents.

[Argonne National Lab](#) **Graduate Researcher**

Lemont, IL (08/2017 to 09/2017)

Machine learning models design of recurrent neural networks to learn patterns for large-scale computing applications. I left Argonne to work at Kyndi.

Publications, Patents, Coding

Computer Science Papers

[Google Scholar \(complete list\)](#)

S Aguinaga, D Chiang, and T Weninger, Learning Hyperedge Replacement Grammars for Graph Generation, IEEE Transactions on Pattern Analysis and Machine Intelligence, 2018

Patents

US 7522614 B1

4/29/2009

US 6977821 B2

12/20/2005

Programming Language Experience

Python: Familiar with Spark, NLP, Numpy, SciPy, Scikit-learn, NLTK, Pandas, NetworkX, iGraph, spacy, PyTorch

C/C++: Embedded, desktop, backend, worked with graphlab, graph-boost

ObjectiveC: iOS app development for mobile computing (3 years)

Java: Android mobile platforms, basic knowledge for mobile app development.

R: Data science, statistics, and data visualization (not an expert)

Databases: MySQL, SQLite, and CoreData, rocksdb, mongodb

Matlab/Octave: Apps and research tool development