

Brian Romanowski

NLP research scientist / engineer looking for engineering-first organizations

MOST RELEVANT EXPERIENCE

Nuance Communications — *Principal NLP Research Scientist*

April 2012 - Present

Led research and engineering efforts on an internal seq2seq-based tool to extract structured information from medical documents. Championed, designed, and built our first cloud-based GPU compute grid to meet research needs. All as a full-time remote worker.

Previously, researched improvements in healthcare question-answering systems. Helped tune a pre-data, rule-based medical classification system by building tools and managing a team of medical coding experts.

Michigan State University — *Research Assistant*

January 2011 - December 2011

Researched improvements to speech recognition using eye gaze and incremental semantic analysis. Built a robot for situated language processing research that integrated computer vision, speech recognition, constraint-based reasoning, and dialogue management.

Presented fifteen 80-minute lectures on first-order logic, Prolog, probability, and supervised learning for the undergraduate "Introduction to Artificial Intelligence" course.

21st Century Technologies — *Senior Research Scientist*

September 2006 - May 2009

Created proof-of-concept implementations at this small Austin, TX company, including: the semantic search of online chat dialogue, pitch detection for the identification of non-language speech sounds, and entity resolution in social networks. Won a proposal for a \$750,000 Department of Defense Small Business Innovation Research (SBIR) grant.

US Peace Corps — *Information Technology Volunteer*

November 2003 - October 2005

Taught high school computer and science courses in Niuatoputapu, Tonga. Created a "computers without computers" course to establish basic computer literacy and improve problem solving, English, and math skills.

EDUCATION

Michigan State University — *Master's in Computer Science*

September 2009 - December 2011

University of Illinois — *Bachelor's in Electrical Engineering*

August 1997 - December 2002

SKILLS

Everyday — Python, Bash, Linux, Slurm, git, vim, remote work

Recent — Rust, PyTorch, fairseq, Tensorflow, tensor2tensor, SQL, SQLite, Azure, SaltStack, Terraform, gitlab-ci

Rusty — Java, Postgres, HTML, CSS, Javascript, grpc

Ancient — Assembly (x86, TI DSP), Matlab, C, Prolog, RDF/SPARQL, OWL

OTHER RELEVANT EXPERIENCE

Research Intern at Honda Research Institute, Japan (Summer 2010)

Teaching Assistant for Engineering Design 100 (Fall, Spring, Fall 2010)

Web Accessibility Developer (Spring, Summer 2006)

Control Research Assistant (Summer 2002)

Firmware Engineer Intern at Hewlett-Packard (Summer, Fall 2000)

SELECT PUBLIC CONTENT

<https://github.com/romanows>
<https://gitlab.com/romanows>

- [Advent of Code 2019 in Rust](#)
- [QuickSelect in Java](#) and [Blog Post](#)
- [Linear Addition from the Log Domain \(Blog\)](#)