ANTHONY LAUZON

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https://github.com/antlauzon

PROFESSIONAL OBJECTIVE

Architect and develop software systems that solve complex problems.

CAREER HISTORY

Staff Engineer Architect, *Audigent* 2016-2022
- Data processing and matrix generation pipeline architecture design and implementation
- Primary research and development of the Hadron identity platform
- Design of vectorization and encoder framework for compact embeddings
- Architecture, security, and research advising across Audigent's technical efforts

Senior Software Engineer, *Urban Outfitters* 2015-2016
- Architecture and implementation of a re-platform data migration framework
- Developing efficient back-end HTTP micro-services
- Object based, programmatic data ETL core design
- Ensuring consistency of a large business-critical dataset

Senior Software Engineer, *RJMetrics* 2014-2015
- Leadership, design and implementation of an infrastructure monitoring and alerting platform on AWS
- Developing features and enhancements for RJMetrics Report Builder
- Design and implementation of machine learning based client quality assessor
- Infrastructure and platform improvements

Independent Work, *Systematic Systems* 2012-Current
- Studio music writing and engineering leading to several releases via Schematic Music Company
- Developed HMM/Markov/Plugin based generative music software in C++
- Designed and implemented a DSP algorithm for extracting raw a cappella audio from music
- Created GPT-2 based academic article generator http://additionalfingers.com
- Developed control solutions for real-time music mapped visualizations and effects
- Created a multi-platform (iOS, Android) mobile social Jukebox product
- Created an augmented reality t-shirt platform that allows people to wear videos
- Designed Tesseract OCR based rotational substitution cipher

Software Engineer, *Google Inc* 2010-2012
- Globally expanded a user tracking system to support real time access to over 400 million uniques stored across hundreds of machines
- Developed a system to determine optimal ad click model feature selection
- Designed and implemented statistical regression modeling back-end systems
- Improved and maintained core components of a 350k+ qps real-time bidding system

Research Programmer, *University of Toronto* 2005-2006
- Programmed auditory psychological experiments from specification
- Designed and implemented technical aspects of a noise pollution free lab
- Generated audio-based experimental stimulus sets
- Provided technical support to lab researchers

EDUCATION

H.B.Sc. Computer Science
University of Toronto, Toronto, Canada