

JoshuaBowles

Founder ALLGroup, Software Engineer

contact

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academic interests

computational math,
data engineering,
machine learning,
scalable systems

programming

Go, Julia, Rust,
Ruby, Python

professional focus

State-of-the-art technology and industry proven techniques. Advocate for solutions that balance innovation with proven techniques. Proven track record of building internal infrastructure and technology for start-ups in quick growth periods yielding high profit returns. I'm a specialist in helping companies utilize machine learning techniques in ways that optimize return on investment.

education

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|-----------|--|--|
| 2023 | M.Sc. Computational Mathematics | Texas A&M University, College Station, TX |
| | <i>Geometric Probability and Numerical Analysis</i> | |
| 2006–2008 | M.A. Linguistics | University Of Utah, Salt Lake City, UT |
| | <i>Amazonian Languages and Computational Linguistics</i> | |
| 2000–2006 | B.A. English, Logic, Linguistics | Metropolitan State College of Denver, Denver, CO |
| | <i>Logic, Literature, and Cognitive Science</i> | |

recent

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|-----------|---|--------------------------|
| 2018–Now | Skipio | Senior Software Engineer |
| | <ul style="list-style-type: none">• Backend distributed systems for text messaging—Ruby• Sentiment and spam classifiers—Go, Julia• Message Clustering—Julia | |
| 2018–Now | Asymmetric Information Logics Group | Founder, CSTO |
| | <ul style="list-style-type: none">• Applying for Non-Profit status• Research and application for geometric deep learning models for massive high-dimensional data• Research and application on logic-based classical knowledge engineering architectures | |
| 2016-2018 | TravelPass | Software Architect |
| | <ul style="list-style-type: none">• Distributed file-system infrastructure and machine learning algorithms for hotel matching—Go• API and DB schema to distribute application payloads to business intelligence—Go, Ruby• Deep-learning model for room-type categorization (proof-of-concept, never deployed)—Go, Python• Machine learning classification system for 3rd party cancellation policies and error categorization—Go, Ruby | |

experience

2014-2016 **TravelPass**

Senior Software Engineer

- Multi-provider platform for travel industry (API proxy to Expedia, Travelocity, Orbitz, Priceline, etc...)—**Ruby**
- Hypermedia API for 3rd party integrators (used by 3 PHP websites and multiple call-centers)—**Ruby**
- Built data schema for business intelligence—**Ruby**
- Algorithm and schema for matching custom hotel data in real time—**Ruby**

2010-2014 **One on One**

Software Engineer

- Data pipeline to consume inventory distribution from machine learning scoring system—**Ruby**
- Data pipeline system to push machine learning lead generation scoring data to business intelligence—**NodeJS, Ruby**
- API for lead scoring model—**NodeJS**
- Helped evaluate modeling for lead generation profile scoring—**Ruby, R**
- Automated bid-system; prototypes for a keyword classification tool and ontology for SEO—**Ruby**
- Designed new tracking-code system using parsing-expression-grammar—**Ruby**
- Maintain and optimize ETL process using Redis and MySQL for Business Intelligence—**Ruby**

2008-2009 **Attensity**

Linguist, Software Engineer

- Ruby, Python, C++ programming
- Text processing and building lexicons
- Named entity recognition
- developed methods for parsing fixed phrases and idioms

tools

Varying degrees of proficiency:

- PostgreSQL, MySQL, SQLite, Oracle, Redis, MongoDB, HBase, Memcached, Group-cache, LMDB
- Docker, AWS (RDS, S3, EC2, Elasticache, SQS), Heroku (Redis, Metabase, PostgreSQL)
- VIM, VSCode, Emacs
- MacOS, Linux (Ubuntu, PopOS!, CentOS, ArchLinux)
- R, F#, LISP, Prolog, Haskell, Elixir, Clojure, Scala
- Tensorflow, Keras, Scikit-Learn, OpenCV, MxNet