

# Lexical Unit

Austin, TX

[resume@lexicalunit.com](mailto:resume@lexicalunit.com)

---

## Experience

### Workplace

Senior Software Engineer

- Lead developer of Scala based microservice for a \$1 M Samsung partnership
- Architected an iOS & Python *Find Fitness Classes* feature in partnership with Mindbody
- Used scikit-learn in Python to build classifier for identifying different kinds of fitness classes
- Refactored existing microservices to use a new real-time stream based notification system, driving 20k push notifications and emails per minute

### Workplace

Software Engineer II - Data & Products

- Instrumented iOS application with event tracking and built new Products centric UI feature
- Prototyped a “Buy Now” button using [Stripe.js](#), a cross-device embeddable payment form
- Implemented a realtime high availability data pipeline using Kinesis and Storm
- Optimized Veg-o-Matic, a SQL based data slicing and reporting tool for A/B testing
- Architected aggregation service built on [Druid.io](#), an OLAP realtime datastore

### Workplace

Senior Software Developer - Data Sciences

- Leveraged sophisticated data mining techniques to solve big data analytics problems
- Sharpened C++ and Python skills by attending PyCon, PyData, and C++ conferences
- Designed and implemented robust Web API resources using Flask, gunicorn, and Nginx
- Collaborated with research and sales teams to produce client driven SaaS products

### Workplace

Engineering Scientist Associate

- Designed high frequency active sonar installed on 75% of US nuclear attack submarines
- Implemented a target tracking and feature classification system for mine avoidance
- Wrote real-time simulation software for stress testing, debugging, and Navy certification

### Workplace

Software Engineer

- Programmed interfaces to data acquisition modules for lab machines

# Lexical Unit

Austin, TX

[resume@lexicalunit.com](mailto:resume@lexicalunit.com)

---

## Open Source

- [nanodbc](#): A small C++ wrapper for the native C ODBC API
- [pancake-master](#): A dynamic webpage for Master Pancake showtimes
- [event-watch](#): Recurring event watch plugin for the Atom editor
- [multi-wrap-guide](#): Multi-wrap guides for the Atom editor, [featured in an Atom blog post!](#)
- [atom-notes](#): Embedded notational velocity for Atom
- [C++ dict](#): Proof-of-concept C++ dict class with Python-like features
- [dotfiles](#): My personalized machine configuration management system

## Education

### School

Bachelor of Science in Computer Science

- Implemented a buddy-system memory manager, and multi-level feedback process scheduler
- Coded in assembly for MIPS processor and modeled a pipelined processor in Verilog

## Skills

- **Languages:** Python, Scala, ruby, Go, JavaScript/ES6, Zsh/Bash, C/Obj-C/C++, Java
- **Tools:** git, Docker, Node.js, Kubernetes, JIRA/Confluence, Jenkins, CMake
- **Services:** Amazon Web Services (AWS), Kibana, Librato, Kafka, Sentry, PagerDuty
- **Databases:** MySQL, DynamoDB, Storm, Druid.io, MongoDB, Vertica/Greenplum
- **Libraries:** AKKA, Finatra, Flask, Ruby on Rails, Boost, fabric, SQLAlchemy
- **Practices:** Agile, SCRUM, Test Driven & Behavior Driven Development
- **Markup:** YAML, JSON, HTML/CSS/LESS/Sass, Markdown, L<sup>A</sup>T<sub>E</sub>X, ERB, Wiki
- **Operating Systems:** MacOS, Linux (RedHat and Debian based), Windows