

Numaer Zaker

software engineer
full stack web developer
unix systems engineer

linkedin: [linkedin.com/in/numaer](https://www.linkedin.com/in/numaer)
github: github.com/numaer

website: numaer.me
email: znzaker@gmail.com
phone: 917.678.7572

education

Stony Brook University
B.S. Computer Science
Aug. 2014 - Dec. 2017
GPA : 3.30

Coursework

Software Engineering
Compiler Design
Operating Systems
Cloud Computing
System Fundamentals II
Analysis of Algorithms
Artificial Intelligence
Programming Languages
Data Structures
Design Patterns
Game Programming
System Fundamentals
Theory of Computation

skills

Languages

Python • JavaScript • Ruby • Java
C • Swift • C++ • SML • Prolog
HTML5 • CSS3

Framework/Library

Java : Spring, Hibernate, Maven, FX
Ruby : Sinatra, Bundler, RedCloth
NodeJS : Express, Mongoose
Python : Selenium, NLTK, PLY/Yacc
Javascript : React, Webpack,
Nightmare, d3, Bootstrap
Etc : LibGDX, Clarifai, Cleverbot,
Box2D, Oauth, Twitter API

Software/Tools

Chef • Ansible • AWS • Git • Vim
Bash • Tmux • Xcode • Android
Eclipse • Netbeans • Unity

extracurricular

Hackathons

Bitcamp • Redhook • HackNYU
CityCamp • Unhackathon
HackCooper • MHacks • HackMIT
PennApps • BostonHacks •
YHacks • HackRPI • AngelHacks
AT&T Hackathon

experience

Millennium Management LLC Intern
Jun 2017 – Present | New York City, NY

- Developed firm's first Chef analytics platform integrated with RESTful API that monitored and visualized over 50,000+ node attributes on 1,000+ servers (Sinatra, c3.js, Unix, Ruby, JS, Bash).
- Improved productivity of compute team by gathering data via custom Ohai plugins to help identify problems across 1,000+ servers.
- Implemented cron+ruby task to compute attribute differences between 1,000+ legacy and Chef servers (Ruby/RedCloth/Markaby).
- Improved reliability and speed of infrastructure automation by reimplementing Perl into Python code and optimizing algorithms.
- Integrated version control (Git) and code review (Gerrit) into project workflow, with 30+ commits to production.

TLL Media Lab Software Developer (Part-Time)
Sep 2016 – May 2017 | Stony Brook, NY

- Built a microscope simulator used by 2,000+ biology students (JS).
- Wrote psychology app to collect research data (MTurk/Boto3/Python).
- Held hourly, bi-weekly meetings with clients to coordinate projects.

projects

Firdango

Software to find movie tickets, times, reviews, and trailers.

- Built in Java using Spring framework (backend), JSTL (frontend), Hibernate & SQL (database), Maven, and Git on Netbeans IDE.
- Designed software with patterns such as Model-View-Controller.
- Worked with a team of 4 following waterfall development methodology.

Seraph

Scalable Twitter AI and automation marketing web application.

- Naive Bayes classifier on users as potential followers or unfollowers.
- Scaled by creating a load balancer and sharding a MongoDB database.
- Used Mongoose, Express, Node.JS, Python, Selenium, and Twitter API.

Xv6 Operating System

Modifications and extensions to the xv6 operating system using C programming to improve performance.

- Modified process round robin scheduler to lottery scheduler.
- Rewrote traditional fork() to copy on write (COW Fork).
- Improved disk write speed by implementing Fast File System (FFS).
- Shell that: ran commands, piped/stdin/stdout, managed process jobs.
- Multithreaded map reduce application using sockets and buffers.
- Dynamic memory allocator with explicit free list and first fit placement.

Decaf Compiler

Compiles Decaf language into assembly language.

- Built lex/parser, semantic analyzer, AST builder, and code generator.
- Programmed in Python using PLY (Python Lex-Yacc) framework.