SHAWN PRESSER

SENIOR SOFTWARE ENGINEER

Chicago
(314) 324 - 1248
shawnpresser@gmail.com

shawwn.com
github.com/shawwn
linkedin.com/in/shawnpresser

OBJECTIVE

To solve and architect complex software engineering challenges with knowledgable and excited coworkers in web application development and network & systems security.

SKILLS

- Strong technical management and communication skills
- Statistical modeling experience in Mathematica, Python, and R
- Application development with C/C++, C#, Java, Python, Node, Go, and Lisp
- Front-end web development with HTML5, JSX/React, and SASS
- Back-end web development with Rails, Node, PHP, Redis, and PostgreSQL
- Strong Unix skills: scripting, configuration, automation, monitoring

EXPERIENCE

Matasano (Chicago, IL — 2014 - 2016) *Information Security Engineer*

- Completed >50 penetration tests of networks and web applications for well-known companies, working both alone and with a team
- Utilized knowledge of systems and networks along with network security monitoring tools to isolate security deficiencies and uncover exploitation opportunities.

Thomson Reuters (St. Louis, MO — 2012 - 2013) *Software Engineer - Market Data Operations*

- Designed, developed, and deployed a new market data routing system using Python and Redis, with emphasis on performance, scalability, and availability.
- The throughput of their old routing system was ~50 market messages/sec, which was too slow to keep up with the sustained market growth they were experiencing.
- The new system achieved a throughput of 1,000+ messages/sec (about a 20x increase) and was limited only by the rate Redis could store the data.

Scottrade (St. Louis, MO — 2011 - 2012) *Software Engineer - Market Data Operations*

- Developed and deployed a concurrent lock-free shared memory ringbuffer
- Achieved the following benchmarks on production hardware (a dual-socket Nehalem 3.3Ghz server):

Latency Benchmark
Sends one message every microsecond until 50 million have been sent.

```
min latency measurement          ~30 nanoseconds
mean latency measurement         ~80 nanoseconds
99% of latency measurements       less than ~150 nanoseconds
99.99% of latency measurements    less than ~8.6 microseconds
max latency measurement          ~0.18 milliseconds
```

Throughput Benchmark

```
max throughput per process/thread  ~11 million messages/sec
```

S2 Games (Kalamazoo, MI — 2010 - 2011) *Game Programmer - "Heroes of Newerth"*

Simutronics (St. Charles, MO — 2005 - 2008) *Graphics Programmer - "HeroEngine"*

REFERENCES

Available upon request.