

spencer tipping

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github **open source** : spencertipping.com

11312 commits, +1037066 -497672 lines: 2009 - present

computer science	ni: fast data processing + visualization phi: FORTH+Smalltalk+Lisp in machine code Caterwaul: rapid Javascript development Lisp + garbage collection in bash How to write a UNIX shell How to write a JIT compiler Javascript in Ten Minutes Information theory in Ten Minutes	spencertipping.com/ni spencertipping.com/phi spencertipping.com/catjs spencertipping.com/blambda spencertipping.com/shellhowto spencertipping.com/jithowto spencertipping.com/js10 spencertipping.com/it10
linux/experiments	An improved cd command for bash Laundry room datacenter Rendering OpenStreetMap history in 4k GPS multipath error + satellite tracking 3D sonar trilateration for cell phones	spencertipping.com/cd spencertipping.com/datacenter spencertipping.com/osm spencertipping.com/gps spencertipping.com/sonar

factual.com Factual : (remote) senior software engineer / data scientist

2012/Aug - 2018/May

Delivered high-impact R&D and efficient, correct core libraries. Shipped MVPs for many different department heads and worked with executives to inform product and research strategy. Highly engaged in engineering culture and hiring; mentored many junior and mid-level engineers across several teams.

computer science	Data pipeline performance Fast bitwise geohash encoding Fast indirect sorting in Java nfu: fast medium-data processing Fast, scalable polygon geometry library Fast entropy-based entity resolution	spencertipping.com/pipeline spencertipping.com/geohash spencertipping.com/javasort spencertipping.com/nfu Java, C: design, implementation, support Java, Hadoop: design + implementation
data science	Fourier transform for geodata forensics Statistical fraud detection Polygon compression Wavelet-based accelerometer parsing Place attachment QA + training data Ontological bias + correction for categories	spencertipping.com/fraud1 spencertipping.com/fraud2 spencertipping.com/polycomp ni, Octave, gnuplot: R&D + documentation ni, Perl, Hadoop: R&D + documentation ni, NumPy: research + implementation
adtech backend	Core processing pipeline Insights processing pipeline Cryptographically secure differential privacy Behavioral model validation + analysis	Clojure, Hadoop: design + implementation ni, Perl, bash, Hadoop: POC + implementation Java, Hadoop: design + implementation ni, Perl, gnuplot: R&D + implementation

google.com Google : software engineer

2011/Nov - 2012/Apr

Google Groups developer using GWT and focused on accessibility compliance.
Gave a tech talk on V8 compiler performance: spencertipping.com/v8perf.

(acquired) Social Media Networks : lead software engineer

2010/Jan - 2011/Nov

Lead client-side developer with full-stack work in Scala/HBase.
Project and development owner for the visual ad editor: spencertipping.com/vedit.

(inactive) Border Stylo : lead software engineer

2009/Jan - 2009/Sep

Lead frontend engineer, co-inventor of the content anchoring patent: spencertipping.com/capatent.
Developed the engineering interview process.

truman.edu Truman State University : math+CS major

2005-2009, dropped out, 3.94/4 GPA

mathematical modeling MathBio: evolutionary drift
MAA competition: airplane boarding

spencertipping.com/2008nsf
spencertipping.com/2007mcm