

spencer tipping		spencer.tipping@gmail.com
// open source : github.com/spencertipping		2009 - present
data science	GPS multipath error + satellite tracking Audio spectral visualization 3D trilateration for cell phones	spencertipping.com/gps spencertipping.com/niaudio spencertipping.com/sonar
infrastructure	ni: fast data processing + visualization Caterwaul: a Javascript recompiler JIT in machine code Self-modifying Perl An improved cd command for bash Lisp in bash	spencertipping.com/ni spencertipping.com/caterwaul spencertipping.com/canard spencertipping.com/smperl spencertipping.com/cd spencertipping.com/blambda
classes/tutorials	How to write a UNIX shell How to write a JIT compiler Javascript in Ten Minutes Information theory in Ten Minutes	spencertipping.com/shellhowto spencertipping.com/jithowto spencertipping.com/js10 spencertipping.com/it10
// Factual : factual.com		2012.08 - present
research	Fourier transform for geodata forensics Statistical fraud detection Polygon compression	spencertipping.com/fraud1 spencertipping.com/fraud2 spencertipping.com/polycomp
infrastructure	Data pipeline performance Fast bitwise geohash encoding Fast indirect sorting in Java nfu: fast medium-data processing	spencertipping.com/pipeline spencertipping.com/geohash spencertipping.com/javasort spencertipping.com/nfu
global places	Ontological bias + correction for categories Fast entropy-based entity resolution	
geopulse	Core processing pipeline (Hadoop + Clojure) Insights processing pipeline (Hadoop + ni) Automatic fraud detection + blacklisting Cryptographically secure differential privacy Behavioral model validation + analysis	
engine	Wavelet-based accelerometer parsing Place attachment QA + training data Competitive product strategy	
/ Google : google.com		2011.11 - 2012.04
tech talks	V8 JIT performance	spencertipping.com/v8perf
google groups	Accessibility design + implementation	
/ Social Media Networks : socialmedia.com		2010.01 - 2011.11
creative	Visual editor	spencertipping.com/vedit
analytics	Internal dashboards + prototyping processes	
/ BorderStylo		2009.01 - 2009.09
research	Content anchoring	spencertipping.com/capatent
frontend	Tech lead for frontend team	spencertipping.com/jstc
/ Truman State University : truman.edu		2005-2009, dropout, Math+CS 3.94/4 GPA
research	Genetic simulation + statistics Airplane boarding + international first place	spencertipping.com/2008nsf spencertipping.com/2007mcm