Andrew Collier

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acollier.com/portfolio

Employment

Principal Software Engineer Gerson Lehrman Group
2019 – Present   Austin, TX

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Designed web infrastructure for automated GDPR privacy enforcement	●		●					
Created an automated source code updater, securing 1,000+ microservices	●			●				
Drove the creation of a client recommendation engine with $1m+ revenue impact	●	●	●	●				
Shepherded the creation of a company-wide dynamic data deduplication system	●	●	●	●				

Senior Software Engineer Gerson Lehrman Group
2012 – 2018   Austin, TX   Boston, MA   Hong Kong S.A.R.

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Created an automated billing system with $3m+ revenue impact	●		●		●			
Wrote project management software upgrade with $2m+ revenue impact	●		●					
Utilized D3 to create a geospatial overview of company growth opportunities	●		●				●	
Implemented recursive JavaScript injection mechanism for legacy web applications	●				●	●	●	
Added multilingual support to core communications infrastructure	●		●					
Built at-a-glance cost minimization visualizations to improve company profitability	●		●	●				
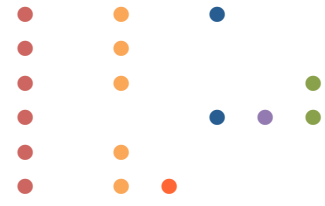
Environmental Consultant Trinity Consultants
2008 – 2015   Columbus, OH   Boston, MA

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Built a web-based greenhouse gas emissions database for transportation sources	●		●			●		
Developed mobile inspection checklist applications for industrial clients	●		●		●	●		
Designed tools to transform regulatory text into machine-readable XML	●				●	●		

Research Software Developer University of California, San Diego
Summer 2006   La Jolla, CA   San Diego Supercomputer Center

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Processed and translated earthquake test data, visualizing in Maya			●					
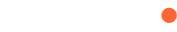
Startups

Founder Soil Insight
2015 – Present   Austin, TX

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Optimized and streamlined a predictive real-time model of soil water content		●	●	●				
Built highly scalable and cost-effective compute infrastructure	●	●	●	●				

Founder Traffic Hackers
2013 – 2016   Boston, MA

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Managed performance and efficiency of a real-time freeway traffic prediction model		●	●	●				
Designed and implemented intuitive visualizations of traffic predictions using D3	●	●	●	●				

Education

M.S. Civil Engineering University of Illinois at Urbana-Champaign
2006 – 2008   Champaign, IL   National Center for Supercomputing Applications

Accomplishment	js	py	sql	sh	cs	vb	rb	java
Created a real-time environmental dashboard with map visualizations								●
Developed a generalized database visualization and exploration tool	●		●					●

B.S. Civil Engineering, Cum Laude University of Notre Dame
2002 – 2006   Notre Dame, IN

Modeled subterranean cryosphere rupture events at Athabasca Valles, Mars
Coded an automated structural analysis system for hospital construction

Skills

Node.js   React   Serverless   Terraform   Docker   AWS   Azure   Microsoft SQL
PostgreSQL   PostGIS   D3   Leaflet   Mapbox   MongoDB   Elasticsearch