

David Stein

Opinionated thing builder



Teamwork

January 2015 - September 2015

Individual contributor on group exploring new product ideas. Thinking about and building new ways for people to collaborate. Focused on chat, email, and file sharing.

search infrastructure (lucene + elastic), web-based WYSIWYG editor, web and desktop clients, operational work on CI and CD systems.

Analytics

June 2011 - May 2013

Focused on empowering domain experts - who didn't necessarily have coding experience - to access, manipulate, and explore data.

Designed and built Dropbox's interactive BI tools, many of which are still in use today. Projects included tools for storing and manipulating data, tools for displaying and editing graphs, a task runner for automated batch processing (with dependency handling).

Before building these tools, handled data analytics for business, product, and marketing teams.

Security and product incident response and preparedness. Partial automation of sales lead generation. Employee onboarding.

Mentored three interns. Two are now full time engineers at Dropbox, one is in an APM at Google.

Internal Tools

May 2013 - January 2015

Initially a personal side project, focused on increasing the throughput and efficiency of non-engineering efforts. Started the team, which eventually grew to 12 people.

Ticket sorting and response automation, lead generation and analysis tools, integrating salesforce with internal BI tools, operational work, rebuild of internal administration tools



Distributed Robotics Lab

April 2009 - June 2011

Research assistant in subgroup of Computer Science and AI lab. Designed, built, and programmed robots.

Research focused on distributed algorithms for controlling robotic construction of structures using groups of heterogeneous, mobile robots.

Systems Engineering Research Initiative

April 2009 - June 2011

Research assistant in aeronautics and systems engineering lab.

Focused on automating decision making and design of large-scale "Systems of Systems"

Built vectorized physics simulator for generating candidate satellite designs and simulating their performance and survivability.

Patents and Publications

(primary authors listed alphabetically)

Unified interface for querying data in legacy databases and current databases

US. Patent 20140195514

David Stein

Multi-Attribute Tradespace Exploration for Survivability

Journal of Spacecraft and Rockets vol. 51 no. 5 (2014)

A. Ross, D. Stein, D. Hastings

Experiments in Decentralized Robot Construction with Tool Delivery and Assembly Robots

IROS 2010

A. Bolger, M. Faulkner, D. Stein, L. White, S. Yun, D. Rus

Presenting data in response to an incomplete query

US Patent 20140181137

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Constraint-aware coordinated construction of generic structures

IROS 2011

D. Stein, T. Scheon, D. Rus

Multi-Attribute Tradespace Exploration for Survivability: Application to Satellite Radar

AIAA Space 2009

M. Richards, A. Ross, D. Stein, D. Hastings