Songqing Zhang

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Github   https://github.com/azuruce
Medium https://azuruce.medium.com/

Experience

ChatSimple / Consultant

March 2023 - now
Consulting for start up spinned off from Cresta Intelligence on technical issues and mentorship.

Cresta Intelligence / Software Engineer

June 2021 - Feb 2023
Joined the conversational AI start up of ~**20** engineers, 5M annual revenue 400M valuation and growed with it to **100** engineers, 15M revenue at 1.6B valuation. Builds simulator for Opera AI command center that automates personalized agent coaching with many **LLM** powered self-serve labeling and training capabilities. Builds self serving Guided Workflow Management tool that captures conversation automation for complex stateful long tail cases that LLM doesn't serve. Built voice PII redaction pipeline. Build Chatbot Operation and Maintenance pipeline. Build Single Sign On. Build **infra** for millisecond dev env develop flow.

Links to some of the products I build:

https://www.linkedin.com/posts/cresta-inc_cresta-opera-activity-7034584951115157504-63xo
 https://cresta.com/blog/simplifying-the-agent-workflow/
https://cresta.com/webinars/supercharging-your-contact-center-with-no-code-ai/

Box Inc / Staff Software Engineer

Jan 2018 - June 2021, Redwood City, CA

Improved team process with Pillar Initiative, Code Review Best Practise, and data driven project prioritization.

Grow team of 5 engineers to 12 over 2 years to rewrite Online Sales growth, provision and billing services that generated *140M USD revenue from almost 0*. Moving to next generation transaction architecture and Micro-service. Write react based programmable In App Messenger to dynamically target users for engagement and upsell that is used to create 200+ customized campaigns, FTUX tooltips, and retention drivers. Delivered 3DS authentication, fraud prevention flows in time sensitive projects.

Delivered **7 tech foundation projects** in the delivery of product projects, on time, with high impact and great **adoption** on ½ of them already and beyond. Instill and establish best practice in the backend to auto generate 60% of the code with 1) Domain

Separation 2) Swagger API/Model 3) Middleware based universal rate limiting, exception handling, logging, prefetch scheme. 4) consistency guaranteed Transaction Service. 5) Event tracking infra. Instill best practice in front end including 6) Developing pattern for encapsulating stateful cross app front end logic 7) Adding Cypress based front end integration test that runs 11 suites on hourly basis.

Started Cypress repo for e2e 2 years ago in Box and now has 16 contributors.

Netflix / Senior Software Engineer
Sept 2016 - Jan 2018, Los Gatos, CA

Build front end single page app with rich interactive components that provides *creative review capability, namely commenting, replying, @mention* and associate comment with a selected rectangle region of an image or a timestamp on a video. Added *realtime notification* for the comments using socket.io. Added videojs player, upgrade ember-cli, add unit-test, update build flow for Ember. Adapt desktop web app for mobile web use.

Build a backend real time notification framework for pushing any database update from backend to front end to ensure users across the board will not see stale data when they are connected to the internet.

The stack of the app includes MySQL, ElasticSearch, Docker based build pipeline, Spinnaker, Jenkins regression flow.

Amazon / Senior Software Engineer
Sept 2014 - Sept 2016, Sunnyvale, CA

DynamoDB, S3, Nodejs, Highchart based Power Visualizer that visualize the power logs of tablets, TV stickers. Django front end, Java backend power bug detection tool for FireOS Framework to identify, de-duplicate, and rank power issues. Nodejs front-end, Java backend, Power Visualizer for FireOS Framework that visualize power data submitted/collected from end-user devices for easy root causing of power issues. Nodejs, Mongodb, Ajax, based Memory Dashboard for FireOS to track memory footprint increases.

Altera / Senior Staff
2011 - 2014, San Jose, CA

Early Power Estimator for FPGA.

NVIDIA / Sr Engineer
2005 - 2011, Santa Clara, CA

Power model group, prototyped real-time prediction of next generation power model through data harvesting from existing sources. Developed display compositor model that can perform color conversion, scale and later video encoding capability. Lead a team of engineers from Shanghai to Implement compositor, display, video engines. DisplayPort and HDMI modeling, implementation and validation.

Skills

High Level Skills

Recently working on conversational intelligence design including LLM based AI platform. ChatGPT driven chatbot design. Build Multi Tenant Microservice SaaS.

Excels in building consistency, reliable and high throughput systems using cloud technology. Deep understanding of why, how of language constructs, programming paradigms and system design. Experience mentor/managing team members of best practices. Experience in leading a team of new grads to build shining professional grade software.

Recent Area

Conversation Artificial Intelligence. PII Redaction, SSO etc.

Redesigning of **order** and **payment** processing backend and frontend flow. Revamping **targeting** and **engagement** flows. Safeguard financial transaction **security**.

Write ups

Medium Article: [Building Billing Service around Swagger](#)

Medium Article: [Transactional Full Stack Application](#)

Medium Article: [Pattern for Encapsulating and Sharing Stateful Logic across Apps.](#)

Medium Article: [Code Review is NOT about Review](#)

[Zuora Community Chapter co-Leader](#)

Programming Skills

Javascript, React, Zustand, Redux, Golang microservice. Swagger, Protobuf, React, Redux, Hooks, Php.

Frameworks

React, Hooks, Redux, Node, Golang

Education

Northeastern Univ / MS Computer Engineering
Boston, MA

Fudan Univ / BS Electrical Engineering
Shanghai, PR China