David Rice

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ACCOMPLISHMENTS

- Designed and implemented a form generation system with a variety of field interfaces backed by a dynamic graph model defined by the user
- Implemented a large breaking change in an active client-facing visualization model through small
 incremental steps alternating between the frontend and backend, leading to a system that could more
 robustly handle user alterations
- Advocated for and transitioned Exaptive's largest application from dataflow code to React.js, boosting
 productivity and allowing the team to leverage its large ecosystem and modern development tooling

SKILLS

TypeScript

JavaScriptReact.js

React.HTML

CSS (Modules, SASS)

Node.js

MongoDBMvSQL

Neo4j / CypherQL

Cypress

Git / GitHub

Webpack

VSCode Live Share

Jenkins

Jira

EDUCATION

University of Oklahoma

Norman, Oklahoma

May 2015

GPA: 4.0, 3.95

- M.S. & B.S. (summa cum laude) in computer science with a minor in mathematics
- Thesis: GenSynth Collaboratively Evolving Novel Synthetic Musical Instruments on the Web
- OU's Game Developers Association President, Webmaster, Team Leader

WORK EXPERIENCE

ExaptiveSenior Software Developer, Scrum Master

Feb 2016 to Aug 2022

Oklahoma City, OK

- Wrote automatically tested code in in-person and remote environments, individually and as a mob, with Scrum and Kanban
- Created the frontend of a multi-model innovation management application and worked through language and tooling transitions to keep up with company goals and increase developer performance
- Developed an array of features for a visual dataflow programming environment including a spacesplitting barn door UX for expanding components, an interactive dataflow minimap, and multi-layered composite components
- Implemented and maintained interactive and combinatorial web visualizations including Sankey and Network diagrams, Choropleth country maps, Gantt charts, and more with D3.js and other web visualization technologies
- Interacted directly with consulting client Cohen Veterans Bioscience to develop a cohort data gathering and visualization application with the Exaptive Dataflow Studio environment

NewSpin

July 2014 to Feb 2016

Senior Software Developer

Oklahoma City, OK

- R&D for web streaming, visualization, and collaboration around point clouds, 360 photography, and large-scale images
- Oversaw transition of a Symfony web asset management app to an AngularJS single-page app
- Rewrote jQuery, WebGL, and WebRTC point cloud visualization software as AngularJS directives

K20 Center

Sept of 2011 to July 2014

DGBL Programmer, Graduate Research Assistant

Norman, OK

- Implemented web and mobile prototypes with Ember and Unity3D and a Node/MSQL backend
- Developed a social platform for future K20 games and interactive lessons in PHP and JavaScript
- Designed and implemented game components for Unity3D (C#) and Ogre3d (C++) including a dynamic scenario system, a geometric decal system, and multithreaded environment collision rendering