

# Cliff Hall

## Software Architect

## CONTACT

cliff@futurescale.com  
futurescale.com ~ cliffordhall.com  
github.com/cliffhall ~ linkedin.com/in/cliff

## SUMMARY

Senior software architect and developer focused on Ethereum blockchain, single page apps, mobile-first design, and NoSQL backends.

I enjoy working in an agile development environment with continuous integration, and have extensive experience working remotely on teams distributed across different time zones.

## CURRENT SKILLS

**Programming Languages**  
JavaScript (ES6/7), Solidity

**Web Development Frameworks**  
React, Redux, AngularJS, SCSS, Bootstrap, Material Design, Node, Three.js, Socket.io, Web3, ethers.js, Truffle, Drizzle, Waffle, Hardhat

**Frequently Used Tools**  
Git, Perforce, MySQL, Firebase, AWS, GCP, Ganache, Gulp, Jasmine, Jest, NPM, Yarn, Babel, ESLint, Solhint, WebStorm

## SELECTED PROJECTS

<b>Avatars</b>	avatars.io
<b>Deja:View</b>	thisisgrow.com/work/deja-view
<b>Sinewav3</b>	app.sinewav3.com
<b>Page Fight</b>	page-fight.net
<b>Matrix</b>	mgstn.ly/1JENE4X
<b>CustomShow</b>	www.customshow.com
<b>CWCT</b>	bit.ly/ZBHMbc
<b>PureMVC</b>	puremvc.org
<b>ChannelMaster</b>	bit.ly/zuMbygs
<b>ISPAN</b>	lmt.co/2LwQ80n
<b>WeightWatchers</b>	youtu.be/AqfXZDvbr4

## RECOMMENDATIONS

"Cliff stepped into an ongoing, \$7 million effort with over 1500 pages of specifications and requirements and began contributing on day one. He took over development of what had been identified as the program's biggest barrier to on-time delivery, the user interface, and transformed it into a polished, ahead-of-schedule component that our end users were ecstatic for. Customers with a wide base of experience with diverse Common Data Link terminals have said that Cliff's user interface is the best looking, most intuitive interface they have ever used on such a device. I could not recommend Cliff Hall and Futurescale more highly than I do. Futurescale will absolutely deliver superlative results in a timely manner."

— Brian Connell, Project Lead, Avtec Systems

"Cliff is one of the most thorough and detail-oriented developers I've had the pleasure of working with. He asks all the right questions upfront and then just delivers the right product at the right time without requiring any further guidance or oversight. He manages his time really well, doesn't shy away from learning new technologies, and does the work with honesty and diligence. I would recommend Cliff to anyone who wants to build a solid product and has no time for micro management."

— Aman Thind, Executive Director, Electronic Trading & Real-time Analytics, Morgan Stanley

## EXPERIENCE

**Futurescale, Inc** Jonesborough, TN ~ 2004-Present  
*CEO, Principal Consultant*  
Clients can expect clean, maintainable, well-documented code, informed by extensive experience and adherence to industry best practices. Authored the Open Source PureMVC Framework and the associated O'Reilly technical book. Also wrote *Building on Ethereum with Solidity and React*.

**Seen.Haus** New York NY ~ May 2021-July 2021  
*Consultant, Architect, Developer*  
Solidity, Node.js, Mocha  
Built entirely new marketplace smart contract suite including primary and secondary markets with a focus on handling NFT + Physical sales. 100% code coverage in tests.

**KnownOrigin Labs** Cheshire, UK ~ Feb 2021-Mar 2021  
*Consultant, Architect, Developer*  
Solidity, Node.js, Mocha  
After several spikes to find the most gas efficient proxy architecture, built artist collaboration and royalty splitting smart contracts, Expanded unit test suites.

**Dapp Wizards, LLC DBA nft42** Boise, ID ~ July 2019-Oct 2020  
*Consultant, Architect, Developer*  
Solidity, React, Firebase, Node.js  
Built the first NFT project to put all art and metadata on-chain. Over 1M USD volume in first 6 months of operation. Devised and implemented a play to earn mechanic.

**Drewmedia, Inc DBA Grow** Norfolk, VA ~ Oct 2017-Jan 2018  
*Consultant, Developer*  
SCSS, Material Design, Angular, Firebase, Node.js  
Added sitewide animation and other features to YouTube's social web game Deja:View.

**On // Off Art, LLC** New Orleans, LA ~ Mar 2017-Present  
*Partner, Architect, Developer*  
Angular 1.x, Angular Material, Firebase, Node.js  
Startup of Culturalyst, a web application for bringing together artists and patrons.

**Morgan Stanley** New York, NY ~ May 2013-Nov 2015  
*Consultant, Core Team Lead Developer*  
ActionScript, Flex, Javascript, Angular 1.x  
Flex to HTML5 migration of Matrix, a modular financial trading and analysis application.

**More Satisfied Clients and Agencies** 2004-Present  
*Adobe Systems, Assurant, Avtec Systems, Effective UI, Cisco Systems, Dorado, JITC, The Jockey Club, J. P. Morgan Chase, Harley Davidson, IndeeLabs, Lockheed Martin, ManyOne Networks, NYK Logistics, State Street Bank, Reputation.com, Sales Graphics, Universal Mind, US Strategic Command, Verizon Wireless, Weight Watchers International*

**Register.com, Inc** New York, NY ~ 2001-2004  
*Senior Developer, Tech Lead*  
Java, J2EE, EJB, Perl, JBoss, Tomcat, Red Hat Linux

**About.com** New York, NY ~ 1999-2001  
*Application Developer*  
Perl, Oracle, MySQL, SQL Server, BSD UNIX

**Prodigy Communications** White Plains, NY ~ 1998-1999  
*Developer, Y2K Test Team Lead*  
C++, Mercury WinRunner, LoadRunner

**Cimtek Medical Company** Johnson City, TN ~ 1997-1998  
*CTO, Software Architect*  
Visual Basic, Quark, IIS, NT Server

**Zfx / Zeta Image** Kingsport, TN ~ 1994-1997  
*Animator, Developer, Webmaster*  
Perl, Prisms, Houdini, SGI IRIX, Novell UnixWare

**Bridge Computer Systems** Gray, TN ~ 1989-1994  
*Programmer, Analyst*  
Oracle, RISC OS, SCO UNIX, UniBASIC

**Professional Data Services** Johnson City, TN ~ 1988-1989  
*Developer, Technical Writer*  
Datapoint DataBUS

**Data Management Group** Johnson City, TN ~ 1985-1987  
*Co-Founder, Programmer, Analyst*  
80x86 Assembly, QuickBASIC, DOS

**Data Equipment Supply** Downey, CA ~ 1982-1984  
*Game Programmer*  
6502 Assembly, Commodore 64, Vic-20, PET