

# JOEL DOUGLASS

Principle Web Developer

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I'm a full stack developer with over 15 years of experience in software and web development. For the last 7 years, I've been into data communication—particularly visualization and data management systems—as a **Principal Developer** at **Velir**, where I lead the Data Visualization practice area. I'm a generalist with experience in back end databases and software architecture through front end Javascript and CSS. Whether it is Python or Javascript, SQL or NoSQL, OOP or FP, .NET or Java, Mac, \*nix or Windows—I believe in using the right tool for the job, even if it means getting out of my comfort zone.

## NOTABLE PROJECTS

### Shift Workers by the Numbers

2018

Purpose Campaigns

Communicating large numbers is hard. This custom visualization attempts to show the large number of U.S. citizens that are affected by a variable work schedule. [Lead Developer](#) · [WebGL](#), [three.js](#), [React.js](#) · [VISIT](#) ↗

### Health Care Quality vs. Spending Interactive

2018

Commonwealth Fund

Health Care performance varies widely across the U.S. In this visualization, health care quality is contrasted with spending by U.S. state. [Lead Developer](#) · [D3.js](#), [AngularJS](#) · [VISIT](#) ↗

### The Davis Project

2016-2018

Velir

An experiment with designing and building a data management system framework and library from the ground up. [Lead Developer](#) · [Node.js](#), [PostgreSQL](#) · [VISIT](#) ↗

### CMS Hospital Quality Chartbook

2015-Present

Centers for Medicare and Medicaid

This collection of data visualizations aims to compare hospital quality statistics around the country. [Visualization Lead, Developer](#) · [Angular.js](#), [D3.js](#), [Drupal](#) · [VISIT](#) ↗

### Nationwide Adult Medicaid CAHPS

2016-17

Centers for Medicare and Medicaid

The NAM CAHPS survey captures estimates of adult Medicaid enrollees' experiences with the health care system. This site was built from the ground up to communicate the results. [Lead Back End Developer](#) · [ASP.NET](#), [SQL Server](#), [React.js](#), [D3.js](#) · [VISIT](#) ↗

### AARP Data Explorer

2015-16

AARP

Built for the AARP Public Policy Institute, this data exploration site allows on-demand publishing of new data and updates. [Tech Lead, Developer](#) · [ASP.NET](#), [SQL Server](#), [Angular.js](#), [D3.js](#), [Highcharts.js](#) · [VISIT](#) ↗

### What Would Happen if Health Care in your State Improved?

2014-17

Commonwealth Fund

This interactive lets visitors explore how health care performance might be different if their state performed like other states. [Lead Developer](#) · [D3.js](#), [AngularJS](#) · [VISIT](#) ↗

### Kids Count Data Center

2013-Present

Annie E. Casey Foundation

The Kids Count Data Center project is designed to communicate childhood wellbeing data. Built to support 50+ admins around the U.S. uploading and publishing new data daily. [Lead Developer](#) · [ASP.NET](#), [SQL Server](#), [Backbone.js](#), [Highcharts.js](#), [Openlayers.js](#) · [VISIT](#) ↗

## EMPLOYMENT HISTORY

### Principal Developer, Data Visualization Practice Lead

2013-Present

Velir · Somerville, MA

- Consult on company strategy for data visualization and communication projects
- Evaluate and adopt emerging tools, languages, and frameworks
- Design and document practice area workflows and processes
- Contribute estimates and technology/system proposals to business development teams
- Lead both front and back end project teams by assigning tasks and tracking progress

### Senior Developer

2010-13

Velir · Somerville, MA

- Led project development teams by assigning tasks and tracking progress
- Designed custom web applications built on the Sitecore CMS and other platforms
- Estimated new project and enhancement work

### Web Developer

2008-10

Velir · Somerville, MA

- Worked with lead developers to turn designs and requirements into functioning web applications
- Maintained legacy systems built on ColdFusion, Classic ASP and Perl

### Senior Systems Engineer

2003-06

General Dynamics, C4 Systems · Needham, MA

- Designed, developed, and executed a full test suite for custom Network Interface (NIC) hardware
- Held a U.S. DoD SECRET security clearance

## EDUCATION

### B.S. Computer and Systems Engineering

1999-03

Rensselaer Polytechnic Institute · Troy, NY

- Graduated Summa Cum Laude