

# Daniel Sa

Senior Staff Software Engineer

Based in San Diego, California



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Versatile full stack software engineer with 15+ years of experience building web applications to handle complex data, particularly in genomics. Extensive experience with Angular web applications with C# back-ends and familiar with other front-end frameworks including React and NextJS.

## RELEVANT SKILLS

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**General:** Typescript/Javascript, HTML, CSS, C#, SQL

**Frameworks & Libraries:** Angular, Angular Material, Tailwind CSS, .NET Core, Entity Framework Core, React, NextJS

## PROFESSIONAL EXPERIENCE

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### **VEROGEN (acquired by QIAGEN), San Diego, CA**

*Senior Staff Software Engineer, August 2017–Present*

- Built a comprehensive and industry-leading forensic genomics solution, instrumental in the QIAGEN acquisition of Verogen
- Architected front-end of flagship product from scratch using the Angular framework
- Technical lead of small team for ongoing feature development
- Developed an enterprise-level application API using C#, .NET Core, and Entity Framework to interpret large data sets for forensic applications
- Implemented unique workflows to simplify complexities across multiple distinct use cases (STR/SNP genotyping, mtDNA analysis, phenotyping, forensic genetic genealogy, population statistics)
- Developed custom data visualizations using D3.js to handle unique domain needs
- Worked closely with the User Experience lead and Product Owners to define and execute a unified product vision.
- Created innovative solutions to allow users to assess complex, layered data at a glance

### **ILLUMINA, San Diego, CA**

*Staff Software Engineer, March 2011–August 2017*

- Led front-end development on a new project to analyze DNA for forensics databases and casework, which drove the creation of Verogen
- Spearheaded effort to modernize the front-end tech stack of the forensics analysis software from jQuery and vanilla HTML/CSS to AngularJS and Bootstrap
- Developed new features on a web application to help users design and order assays to target specific sections of the human genome

**1PARKPLACE, San Diego, CA**

*Software Engineer, January 2008–March 2011*

- Developed features on a CRM solution to help capture leads and manage prospective clients for real estate agents and brokers
- Maintained data pipelines that processed tens of thousands of records of real estate listing data daily

**EDUCATION**

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**UNIVERSITY OF MICHIGAN, Ann Arbor, MI**

*Bachelor of Science, Electrical Engineering, May 2007*