



3Qs with Will Gifford

Will Gifford is a Senior Data Scientist at TROVE focusing on the development of new predictive data science applications – aka Solvers – and large-scale deployments of the TROVE platform for electric-utility clients. Prior to joining TROVE, Will led projects to quantify demand-side management and distribution efficiency resources at a large energy consultancy and served many analytical roles for the U.S. Department of Energy.

1 We hear a lot about the TROVE Science Squad™, but not often from those inside it. What can you tell us about being a member of this team?

Not surprisingly, The Science Squad is the heart of TROVE Predictive Data Science. Although we are a technology company – not a consultancy – the Science Squad and its work are the #1 association our clients have with TROVE. Software is deeply important to us as a company, but we do not push software – we push value.

Our investment in the TROVE platform and our software engineering team is a reflection that technology is integral to how the data science team delivers value. But again, at our core, TROVE is data science, so the Science Squad has the ultimate responsibility of delivering value through data science. We will not be a successful company if the technology and the data science aspects are out of sync.

2 What is it like working on the Science Squad? What is the Science Squad uniquely good at doing?

An interesting change happens to our team members when they join the TROVE Science Squad. Almost to a person, each Science Squad member has talked about moving from being a real “superstar” at their prior company to being “one of the team” here. There is a collective checking the ego at the door here at TROVE, but also a real pride in belonging to this elite group of data scientists. In keeping with this, we are very deliberate in how we select and onboard new members of the Science Squad, because this team is so deeply linked with our culture, i.e., having exceptionally talented, friendly folks who live to tackle tough problems and relish seeing the results.

The Science Squad is uniquely good at synthesizing an effective technical approach for a challenge. The synthesis process is not something that can be taught, but rather it's honed through years of real-world experience, and it's a critical component of what we look for when we bring on new data scientists. An important part of this process is communication among our Science Squad team – we are always sharing ideas and best practices to help each other in every client engagement – to gain a collective perspective. When you have the kind of experience on the team that we do, drawing on it is a real differentiator.

3 How does the Science Squad engage with clients?

The first thing we do is connect with our clients on a personal level, learning not only about the challenge or opportunity, but really diving into it, understanding it in all its facets, especially the motivation for it and what they would like to see as an outcome. We also understand that our client points-of-contact have widely varying backgrounds, so we draw on our diversity as a team – and array of experiences solving a wide variety of problems – to begin building their trust. It is so important to establish that you really have their back as a partner – and that trust-building process begins right up front as we parse the opportunity.

Some things we have to figure out right up front are:

1. Is this a new or ongoing challenge?
2. Is the cost of the challenge understood in terms of \$\$\$, tied up staff hours, reliability, or environmental or regulatory requirements?
3. How can progress and success be tracked and measured?
4. How is the client addressing the challenge now, and, if different, how did they do so in the past? What has worked well, and what has been a struggle?
5. What data is available to work with?
6. What can be done with the data in its current state, and how can improved data quality help take it further?

While connecting with the challenge, the Science Squad taps into our internal bank of approaches, leveraging our education and real-world experience as data scientists. Fundamentals are key in this triage – there may be a sound statistical model that has been around for many years which may outperform a newer machine-learning model that emerged very recently. We're not biased. We'll always choose the approach we think will deliver the most value to the client.