DATA CLASSIFICATION

Super-H helps companies get ahead of competition with boost from OSC

When Richard Hughes, Ph.D., set off to found his own data-analytics company, The Ohio State University physics professor stuck with what he knew: proprietary algorithms, machine learning and use of the Ohio Supercomputer Center's high performance computational resources. Super-H, founded in 2015, is a data-analytics firm that helps companies strike a competitive advantage in their industry by providing Big Data solutions and fast, accurate answers to strategic questions.

"Our product is a website that basically organizes data related to research that's being done in different areas," said Hareesh Menon, software developer at Super-H. "We organize it and provide it to clients in a way that they can use to understand the areas they can focus on or what their competitors are doing.

"We use OSC for a lot of data processing and analytics of our data."

The company also has used OSC's Oakley Cluster for processes, such as MySQL hosting, raw data processing and data classification. For example, one of the specific projects involves institution disambiguation. Super-H collects research institution data from PubMed. The institution names could be entered into the database in multiple ways, so one of Menon's jobs is to run the names to find every iteration of each institution and group them together as one.

"Because we're processing so much data, it takes a lot of time, and so using the supercomputer helps decrease the time," Menon said. "It's been a great resource for us, and I don't know if we'd be at the point where we are now in the same time period if we hadn't had the Ohio Supercomputer Center."

Currently, Super-H has a prototype of its web-based customized research platform and soon will create a minimal viable product to gain more clients, with plans to expand the product and features in the near future.

"Super-H is a great example of what OSC can do for small, up-and-coming businesses that need extra computing power," said OSC Director of Strategic Programs Alan Chalker, Ph.D. "We look forward to seeing them grow and helping provide whatever high performance computing resources they may need in the future."



PROJECT LEAD // RICHARD HUGHES, PH.D., SUPER-H RESEARCH TITLE // INFORMATION PROCESSING AND ORGANIZATION THROUGH BIG DATA AT SUPER-H FUNDING SOURCE // SUPER-H WEBSITE // SUPERHINDEX.COM