

## PREMIUM

## FINANCE

# Inside Citadel's exclusive engineering program that's helped the \$47 billion hedge fund snap up talent from Google and Goldman Sachs

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- Citadel's NXT program is its key recruitment channel for engineers amid the war for tech talent.
- NXT targets those with 2-6 years of experience and has lured talent from Big Tech and finance firms.
- Citadel's CTO details how NXT is run and why it's become critical to the firm's innovation.

Umesh Subramanian, Citadel's chief technology officer, is not interested in doing things in a "Citadel way."

"The way we've done things so far— it's only a data point," Subramanian told Insider.

That's why when new, but experienced, engineers enter the Citadel fray, "we openly tell them, 'look, we asked you to come here to look at things, question everything, and change what you need to change,'" added Subramanian, who was a partner and co-head of technology at Goldman Sachs before joining the firm in 2018.

The strategy — to not only welcome but encourage firm-wide change through new hires challenging the status quo — is shaping hiring efforts at Ken Griffin's \$47 billion hedge fund. It all comes down to the firm's early-career engineering program, called NXT, which has enabled Citadel to snap up talent from tech behemoths like Google and large banks like Goldman Sachs and Deutsche Bank.

NXT has become a key recruitment channel for Citadel amid an unrelenting war for tech talent on Wall Street, and while some firms strategize quantity over quality, NXT is quite the opposite. Only 3% of applicants receive an offer from a self-selected pipeline, Subramanian said. Founded in 2018, NXT has grown to have 149 people in the network, both alums and active members, which is roughly one-quarter of the firm's engineering workforce.

"If you think about where we recruit this talent from — they have already been in selective companies who hired them from exceptionally selective colleges," he said.

Insider spoke to Subramanian and program alums about how the under-the-radar program is driving massive technological transformation at the hedge fund. The changes range from cultural tweaks around how the tech org works with investment teams to a complete re-architecture



LUCY NICHOLSON/REUTERS

Citadel founder Ken Griffin.

of an enterprise data platform, an initiative kicked off by an NXT alum.

### The program fuses technology and business

The typical NXT candidate has already worked as an engineer for a few years inside one of the industry's top firms straddling technology and finance.

"We started thinking there is this sweet spot of people who have been working for several years and they're accomplished. They've learned something from where they are but they are looking to do something different," said Subramanian.

The two-year program has both a mentorship aspect as well as an upskilling one. NXT members get to work closely with Citadel's front office, like portfolio managers and research analysts, as well as back-office

engineering teams, like those that build and maintain tech such as data tools and dashboards. They also receive training on financial fundamentals like markets, risk, and investment products.

NXT participants are also paired up with more senior engineers at Citadel for career guidance, professional growth, and get access to Citadel leadership, like Subramanian, and quarterly fire-side chats moderated by Koby Rosenschein, head of engineering communications at Citadel.

The elite group of participants typically also get first dibs on high-impact projects, which are used either across the company or within NXT members' respective teams.

### **External hires drive big changes internally**

Robert Tan, an NXT alum who was hired from Google in January 2019, started out at Citadel as an engineer on the enterprise data team with a focus on reference data. His team worked with information about the products Citadel trades.

Not even a year into the program, Tan was promoted into a management role where he led a team of two. "It put me on the fast track career-wise to be successful here," Tan told Insider of the NXT program and access to senior leadership.

Fast forward to today, Tan's team is 14-strong and is leading the charge

on a complete overhaul of a key data platform that will see Citadel replace its software stack and reimagine its data model, Subramanian said. The change stands to ripple through the entire firm because data is the lifeblood of the investing businesses' decisions.

Jae Eun Oh, a quantitative developer at Citadel who joined in March 2020 from Deutsche Bank, built a dashboard that showed portfolio managers the riskiness of trading decisions as the pandemic rocked the global economy. The tool, which gathered data from different government resources, has evolved into a broader economic dashboard that has data relevant across global fixed income, like info about inflation and activity growth.

Fixed income strategies like US treasuries experience higher levels of trading activity during periods of volatility since they are liquid. High inflation can have negative impacts on fixed income strategies if it leads to higher interest rates.

Oh has been working with portfolio managers and economists to develop its bottom-up inflation model, since the topic has been top of mind for investors this year.

The goal of the dashboard is to help decipher what types of economic scenarios could impact trading activity, she said.

"We've had some amazing success with this talent," Subramanian said. "They will be our future leaders and the returns have been profound."