Building Instagram

Tyler Kieft '09, '10 (T5) helps develop some of the photo-sharing app's latest features.

By Caitlin Mack '12, '13 (T5)

WHEN **TYLER KIEFT** '09, '10 (T5) SHARES striking landscape photos of the San Francisco Bay, scenes of New Zealand, and shots of picturesque forests on his Instagram feed, he receives hundreds of likes from almost 6,000 followers. You would expect nothing less from Kieft, an Instagram engineer who has helped design several of the photo- and video-sharing application's flagship features.

Instagram, a massively popular application among smartphone owners, each month allows over 200 million iPhone, Android, and online users to edit photos and videos and share them with followers.

"When I started at Instagram, the entire staff could fit around a single table," says Kieft. "It's exciting to work on something that touches the lives of so many people."

In the last year, Kieft has been integral in the design of several Instagram features, including "Photos of You," which enables users to tag friends; the app's video-sharing feature, which allows users to create and share videos up to 15 seconds long; and Instagram Direct, which lets users send photos and videos to specific followers.

Kieft joined Facebook in June 2012, two months after the social media giant acquired Instagram for what was then a headline-grabbing $1 billion. In November 2012, he was one of the first engineers hired from Facebook to work on Instagram and the second person to work on the application specifically for Android smartphone users.

Most recently, he was the sole engineer on a project to update Instagram for Android, working with a designer to update the app's look while also reducing its size and making the application run faster.

"I take great pride in the quality of Instagram for Android," says Kieft. "My aim is to make the app feel great and add features that enhance every user's experience."

Kieft says the appeal of working for Instagram lies in the small-time feel of a start-up with the perks of a big company. "Instagram is sectioned off from Facebook," he says. "In some ways I feel like I've found the perfect space for myself."

During his final year at Rochester, Kieft hit it off with a Columbia University student at a career fair and began collaborating on an online video transcription service. After graduating in 2010 with a degree in electrical and computer engineering and a minor in computer science, Kieft and two cofounders launched the service as SpeakerText. Though Kieft and his cofounders raised $1 million through Silicon Valley investors and garnered five-digit monthly revenues, they failed to agree on a cohesive business model, resulting in Kieft's departure from the company in 2012.

The decision to choose an entrepreneurial experience right out of college prepared Kieft for the job at Instagram. "The business impact it had made me a stronger engineer," he says. "You need to think about

more than the product itself. What is the biggest reason that people use your product? What kinds of features are customers calling for? Sometimes you need to gauge these questions yourself."

For Kieft and the Instagram for Android team, the mobile platform poses challenges associated with the scope of Android-powered hardware, which ranges from inexpensive small phones to high-definition fast phones with large screens.

Philip McAllister, engineering manager

▲ PICTURE THIS: Photos from Kieft's Instagram feed (opposite) provide a picture of his interests as an avid user of the photo-sharing application that he has helped develop as an early member of the San Francisco–based company (above).

for the Instagram for Android team, says Kieft has "made a huge impact on millions of people by making Instagram look beautiful and feel great on the thousands of different Android phones." According to McAllister, Kieft has led Android engineering efforts on video playback, sponsored posts (which most users know as advertising), and client performance.

The success of tech start-ups like Instagram has led to an increase in demand for software engineers, with many software companies vying for the same people.

"You don't see how software is ruling the world until you come out here," says Kieft. "There is a mind-set of dreaming big and the most important thing is ability. You're judged less on formal qualifications."

Kieft says his alma mater's open curriculum prepared him for the entrepreneurial mind-set of the tech industry. "At Rochester, you get to craft your education and make your own decisions. That affects your confidence and your career," he says. "It's important to choose what you're passionate about rather than choose the 'right career.'"

For Kieft, his passion follows him wherever he goes. "When I see people using Instagram on a train or at the airport, I think, 'Wow, I helped make that,'" he says. "There is such a huge positive association with the app." ℞

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