FullContact

LOCATION
18th & Blake (LoDo)

IDEAL TEAM SIZE
4

Who Knows Who Graph

About Us:

FullContact is solving the world's contact information problem. We're a 2011 TechStars Boulder graduate that provides APIs and applications that allow businesses and consumers to keep their contact information up-to-date automatically. We're a team of 80 people located in LoDo, walking distance to Union Station and the 16th Street Mall.

About You:

You enjoy solving hard problems and figuring out how to make things work. You are passionate about algorithms and machine learning. You enjoy working with and building highly-scalable and available RESTful APIs.

The Project:

In 2011, a brilliant Field Session team helped FullContact build what is now a core component of our tech stack: a graph-based "who is who" identity resolution engine. Now, we are looking for a stellar team to help build our next major evolution: a graph based "who knows who" engine. The first application of this technology will be the development of a referral engine.

Social graphs are well-known these days in large part due to the popularity of social networks like Facebook and LinkedIn. However, as those networks have grown in size, the accuracy and precision of the relationship data has become diluted. In many cases for example, people who

barely know one another become "connected" after meeting only once or because they had some kinship in the distant past. Such "connections" are typically indistinguishable from deeper, ongoing relationships.

With FullContact's suite of address book applications (including iPhone, Android, Web, and Gmail), we have unique access to millions of up-to-date address books as well as access to many actual communication behaviors such as sending emails, making calls, and texting. With these data points we are well-positioned to provide a truly accurate picture of not only who-knows-who but also how *well* they know one another and how **active** the relationship is.

This goal of this Field Session project is to build a prototype of the who-knows-who graph that will form the basis of our future products. Expect this to be a challenging and rewarding project. In addition to solving hard problems, you will also get to play in a cutting-edge playground that includes technologies such as Kafka, Crunch, and Spark, along with graph databases and algorithms.

What Success Looks Like

A successful project will be able to:
- Track behaviors of FullContact Users to understand the strength of connection between individuals.
- Algorithmically detect connections between individuals in the graph and also demonstrate the strength of the connection.
- Bonus Points: For a user of the FullContact address book apps, apply the technology on their address book to determine the strongest connections that should be suggested for referral to our products.

Skills Required
- You must be willing to solve (really) hard problems
- You must enjoy working with Algorithms

Student Benefits
- You will end the session with the reward of solving a hard problem
- You will be exposed to cutting-edge technology
- You will be working in a collaborative environment with other smart engineers
- You will experience the business and engineering methodologies that FullContact employs

Summer Internship:

A limited number of paid summer internships may be available upon course completion. Also, about ⅓ of our full time engineering staff are graduates of CSM and participated in field session projects that we hosted.