OVERVIEW

BlackRock is a global investment firm, trusted to manage more assets than any other. Its clients are companies, governments, foundations, and millions of individuals saving for retirement, their children’s educations, and a better life. They are passionate about providing products and services that can help them build a strong financial future. BlackRock employees from around the globe are students of the market and students of technology, respectfully anti-bureaucratic, and innovative at the core.

Roles and Responsibilities
Software Engineering at BlackRock builds products and services to meet the needs of BlackRock and all of our clients. Our technology culture and solutions help to distinguish BlackRock as an industry leader in both asset management and cutting-edge technologies. The team is made up of software engineers, data scientists, data engineers, quant developers, DevOps engineers, product managers, business analysts, UX engineers, UX designers and more, all working to drive innovation in the financial services industry.

Our team is known for:
- Being passionate about technology and solving complex problems
- Being from diverse industries and educational backgrounds
- Developing in Java, Python, Cassandra, Kubernetes, Kafka, Docker, a host of languages and open source technologies
- Being technology thought leaders that unlock incremental innovation and drive technology culture at BlackRock
- Software Engineering Teams are mostly centralized across three major organizations: Aladdin Product Group, Aladdin Risk for Wealth Management and Digital Wealth Management. There are also several specialized technology teams across other business areas.

As an analyst you will:
- Gain a broad understanding of the investment process and the capabilities of Aladdin
- Become a life-long learner through our BlackRock Academies
- Work closely with senior engineers developing specific parts of the Aladdin platform.
- Take ownership of small projects and watch your creations be released to thousands of users
- Use cutting edge technologies such as Spark, Storm, Solr, Cassandra, Hadoop, Angular, React, iOS, and more
- Collaborate with colleagues to create innovative products during firm wide hackathons
- Meet smart, fun people through volunteering, employee and professional networks, and every-day interactions
- Aladdin Product Group Only: Participate in four 6-month assignments across various teams during a two-year rotational program, providing a breadth of experiences to teams, technologies and businesses.

Aladdin . . .
- Unifies all of BlackRock by providing a central technology platform that integrates our investment activities globally
- Supports the full lifecycle of the investment management process, from quantitative risk management to order entry, trading and settlement activities
- Runs as a commercial business

Engineering innovations
- Real-time market data system
- Leveraged Apache Storm to build a distributed, fault-tolerant platform to process streams of tens of millions of market data points for bonds and other financial instruments in real-time. The platform interacts with data stores such as Cassandra and Solr and uses machine learning algorithms to gain analytical insight into streaming data.

Predictive mortgage analysis
- Created a distributed platform using Spark and Hadoop to analyze 1 billion loan-level mortgage observations growing at a rate of 25 million observations per month. Used machine learning algorithms on the entire data set to build a predictive model to identify whether a loan will default.

Engineering in the Works
- Open Aladdin – APIs and more
- Cloud Strategy
- DevOps and Site Reliability Engineering

Education and Qualifications
This program is for candidates in their final year of study and obtaining their bachelor’s degree or their master’s degree with less than 18 months full time work experience.

How to Apply