

Amortya Ray

CONTACT INFORMATION

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EDUCATION

Columbia University, New York, NY

Masters in Computer Science, December 2007

Sardar Patel College of Engineering, Mumbai, India

Bachelor of Engineering in Computer Engineering, June 2006

TECHNICAL SKILLS

- Programming: Java, Python, Shell scripting, \LaTeX 2 ϵ
- Web: JQuery, JSON, Flask, Bootstrap, D3, REST APIs
- Tools: Spring, Hibernate, Flask, Redis, Solr, Elastic Search, Excel VBA

PROFESSIONAL EXPERIENCE

Nomura Securities, New York, NY

Associate

September, 2010 – present

- Global Markets Research
 - Designed and built a Python framework for the Research Desk to perform historical time-series analysis and backtesting of trading strategies.
 - Led a team of 3 to implement a multi-tenant, highly available, fault tolerant search engine. The service is designed to deliver accurate results with minimal latency. It supports highlighting, suggestions for autocomplete, faceting and is distributed in nature.
 - Developed tools used by traders and research analysts for pre-trade analysis in lieu of a vendor product resulting in annual savings of \$500k.
 - Designed and implemented a global, replicated in-memory caching layer.
- Fixed Income - Architecture & Infrastructure
 - Designed and developed the reference data infrastructure to support the Global Markets (Fixed Income and Equities) businesses.
 - Designed and implemented a new data model for modeling reference data using Java annotations. The data model allowed automatic generation of Java and C# classes and querying multiple data sources without the need to write additional code.
 - Implemented a Lucene-based search index using Apache Solr to support full-text search across various entities

Lehman Brothers/Barclays Capital, New York, NY

Senior Analyst

February, 2008 – September 2010

- Risk Services - Core Risk Engine
 - Part of a global team that developed a generic plugin-based risk framework using C++.
 - Contributed to the instrumentation effort to supply clients with performance data.
- Credit Analytics - Credit Marking Service
 - Developed and enhanced several key components of a Java/J2EE application responsible for providing CDS curve spread data for the firm's CDS trade booking and pricing systems.

ACADEMIC PROJECTS

ThinC - A Java based client for Thin-Client InterNet Computing server

- Developed a Java application for a virtual display system with full support for regular desktop interaction, screen-scaling, audio and full-motion video playback.
- Designed the client to be extremely lightweight and capable of running in a VM on a minimal terminal.

ADDITIONAL QUALIFICATIONS

- Successfully appeared for the Series 7 and Series 63 examinations conducted by the FINRA.

INTERESTS

- Long distance running