

Paid Internship in Software Engineering **September-December 2013**

You can access this document online at
<http://goo.gl/Ud8hll>

Nextropia LLC, a software consulting firm located in Stamford, is seeking a software engineering intern with very good web development skills to work on a web application in the financial industry during the period September-December 2013.

You can work remotely, on your own schedule, and are only expected to be available for hour-long online meetings every 2-3 days during evening hours.

The internship pays a small stipend of \$1500, payable in 3 installments at the end of each completed month. However, the true benefits you will derive as an intern for Nextropia are: experience with software development for the financial industry; a good understanding of financial markets and trading strategies; architecting a real-world project with significant technological challenges, using the latest technologies. You may also utilize this project as your Master or PhD thesis and Nextropia will support you in that regard.

To be considered for this internship you must have previous, extensive experience developing dynamic browser-based user interfaces. While other technologies will be considered, we prefer one of the following stacks:

- HTML5/Ajax + Python (strongly preferred)
- Silverlight + WCF (discouraged)

Experience with Google AppEngine and message queue architectures are huge pluses. Experience with NoSQL databases also a plus.

To apply for this internship you must develop a simple demo application as described below. The deadline is September 15, 2013, 23:00 ET. To apply, submit the following to contact@nextropia.com before the deadline:

1. A brief description (1-3 paragraphs) of your background with software development, including which technologies you have worked with and in what context.
2. A brief explanation (1 paragraph) of why you are interested in this internship and what you hope to achieve from it
3. A URL to the implementation of your demo application

Demo Application Specification

If you have any questions about the specification below you may email contact@nextropia.com

Implement a web-based application with the following features:

- The application runs in any mainstream browser
- All user interaction is dynamic, meaning that the page does not reload following user action
- User can register and sign in using a Google account (see <https://developers.google.com/accounts/docs/OAuth2Login>). (You may use either Google AppEngine, Yahoo YQL Hosted Storage, or any other storage infrastructure you prefer to keep track of user accounts.)
- Upon sign-in, the user is presented with a grid as illustrated below. If the user previously entered data into the grid, it will be available when signing in.
- Clicking the Add button allows the user to add a new row to the grid
- Clicking the Delete link (or button) allows the user to remove a row from the grid
- Clicking the Symbol column in any row allows the user to edit the value (change the symbol) to any string 1-10 characters
- Clicking the Entry Price column in any row allows the user to change the value to any number > 0, formatted to 2 decimals
- The Current Price column displays the current price of the symbol, updated every 30 seconds. Prices must be retrieved from Yahoo Finance via the YQL API (see <http://datatables.org>)
- The Entry Price column is populated automatically with the Current Price value when a new row is created
- The Gain column displays the difference, expressed as a percentage, between the Current Price and Entry Price values

Add New				
Symbol	Entry Price	Current Price	Gain	Delete
AAPL	420.18	443.38	5.5%	[X]
TSLA	251.78	212.49	-15.6%	[X]
MSFT	54.28	37.10	-31.7%	[X]
GOOG	420.18	443.38	5.5%	[X]