



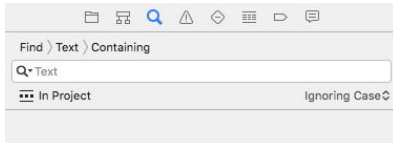
# Kareem Moussa

## Software Engineering Intern

### Interface Builder

#### What Did I Do?

I worked on the Find Navigator, which is the search tool on the left hand side of Xcode:



My job was to make search speed significantly faster by using concurrency and other special techniques.

I developed in Objective-C and C, and used a lot of the Cocoa APIs.

#### Connections

- CSE 30 for developing in C
- CSE 100 for profiling and data structures
- CSE 110 for design patterns and testing
- CSE 141 for understanding the cache and other hardware
- CSE 105 for parsing techniques and context-free grammar

#### A Typical Day

- Profiling and benchmarking
- Using the MVC design pattern to write code
- Talking to other engineers and learning about the Xcode codebase
- Code review session
- Taking notes, keeping track of improvements
- Soccer with coworkers

#### Cool Stuff I Learned

- Good concurrency design
- Abstract Factory Pattern
- Unicode and it's importance
- Special data structures:
  - Bloom Filter
  - Uniquing Table
  - Suffix Tree
- Recursive Descent Parser
- How to explore lots of code