

**Sudeep Juvekar**, ([sjuvekar@gmail.com](mailto:sjuvekar@gmail.com))

**Blog:** <http://sjuvekar.appspot.com/blog>

**Github:** <https://github.com/sjuvekar>

**Stack Overflow:** <http://careers.stackoverflow.com/sjuvekar>

## Profile

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I am a versatile programmer with deep experience working on broad spectrum of programming languages and technologies. I have been working on analyzing and developing efficient machine algorithms for gigabytes of financial data. In my spare time, I have developed and shipped two iOS apps and one android app with strong reviews and thousands of downloads. I have also developed and shipped an end-to-end database-backed web application - 3dthon.com

## Areas of Expertise

- Big data/Machine learning/Statistical inference
- Functional programming/Scala
- Full stack web development
- IOS/Android

## Education

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- 2002-2007 **Indian Institute of Technology, Bombay**  
B.Tech. + M.Tech. (Dual Degree) Computer Science and Engineering GPA: 9.6/10.0
- 2007-2010 **University of California, Berkeley**  
M.S. Electrical Engineering and Computer Science GPA: 3.89/4.0

## Experience

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**Tower Research Capital LLC**, New York, Algorithm Developer/Quant, 2010-Present

- Wrote highly efficient code to connect to financial exchanges, download and clean market data
- Performed statistical analysis of the market data to predict market movement and future prices. I have used various technologies for this including R/Python-sklearn. I was first to use non-linear models like *random forest/gradient boosting* on market data with demonstrably better prediction accuracy
- Developed trading strategies/algorithms that use these statistical "signals" to place order on market.
- Developed an elaborate automated risk-monitoring framework that automatically checks the orders against market requirements and stops trading in adverse market conditions.

**Technologies/Languages:** C++/STL/Boost, R, Python-sklearn

**Microsoft Research**, Redmond, Research Intern, Jun-Sep 2009

- Wrote automated bots/algorithms to discover the worst-case runtime complexity of a piece of program.
- The algorithms consisted of analysing program traces using different inputs as well as performing systematic loop analysis on the source code.
- Demonstrated the utility of our approach on large codebases inside Microsoft to find performance bugs/inefficient loops.

**Technologies/Languages:** C#

## Open Source Contribution/Apps/Websites

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- **3dthn.com:** 3dthn is the first online competition arena for 3D printing where 3D printing experts compete to produce/manufacture 3D models required by others. Anyone on 3dthn can create a 3D printing competition and decide winner among model submissions from experts.  
**Technology/Languages:** HTML, CSS, Twitter bootstrap, node.js, mongoDB
- **IGlassDoor:** A responsive iPhone app for popular career website glassdoor.com, before their own app came on the store. Reached about 1000 users and strong reviews in a week before retiring from the App store.  
**Link (Code):** <https://github.com/sjuvekar/IGlassdoor-ios>  
**Technology/Languages:** HTML, CSS, jQuery mobile, phonegap
- **Coin of Life:** An addictive board game on Android/iOS platform. Reached a combined thousand users on both platforms within months with near five-star reviews on Android.  
**Links:**  
    **Android:** <https://play.google.com/store/apps/details?id=com.ramsud.coinoflife>  
    **iOS:** <https://itunes.apple.com/us/app/coin-of-life/id796742280?ls=1&mt=8>  
**Technology/Languages:** HTML, CSS, JavaScript, phonegap, Android/iOS SDK

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## Other Achievements

- Regular participant in big data/machine learning competitions at **kaggle.com**. Have developed strong predictive algorithms for variety of domains including Expedia Hotel Ranking prediction, Microsoft Academic Search Author prediction, and Facial Expression Recognition. Among top 0.2% of all users on kaggle.com. (**Link:** <http://www.kaggle.com/users/65687/ramsud>)
- Among top 30% of Python experts on stackoverflow
- Graduated top of the class from IIT Bombay – recipient of IIT Bombay Institute Silver Medal

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## Software Skills

- Proficient in Python/Java/C++/Javascript/Jquery/HTML/CSS/bootstrap
- Strong background in machine learning/predictive modeling using R, Python sklearn
- Experience developing web apps with Ruby-on-Rails, Google app engine, AWS/EC2/S3
- Familiarity with advanced functional programming in Scala. I maintain a popular **Scala Cheat Sheet** on github with many contributors (<https://github.com/sjuvekar/reactive-programming-scala>)
- Version control and build tools: git, Jenkins
- Experience developing mobile apps using phonegap as well as native iOS and Android SDK
- Familiarity with Hadoop/HDFS

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## Certifications/Specializations

- Coursera: Machine Learning, Graphical Models, Mobile Cloud Computing with Android, Functional and Reactive Programming with Scala