Esteban Foronda Sierra

1 Personal Data

Place and Date of Birth:	Colombia | November 2nd 1994
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Github:	https://github.com/EstebanFS

2 Interests / Hobbies

Coding, Teaching, Programming Challanges, Competitive Programming Contests, Learning new things.

3 Education

Current studies:

System engineering ,Computer Science
EAFIT University(Medellin, Colombia)
2012-2016 (Expected)

Current Cumulative (GPA):

4.39(5.0 scale)

Computer Science Subjects:

Programming Fundamentals.
Principles of software development.
Programming languages.
Data structure and algorithms I and II.
Databases.
Digital Electronics and Circuits, Digital Logic and Microcontrollers.
Formal languages and compilers.
Software engineering.
Technology Integration Project I and II
Systemic thinking, Information systems.
Telematics.
Computer Graphics.
Computer Architecture.
Numerical Methods.
Special Topics in Telematics.
Special Topics in Software Development.
Special Topics in Information Systems.
Operating Systems
Programming paradigms
Operating Systems
Management of informatic projects
TCP / IP Networks
LAN Networks
WAN Networks
TI Architecture

Mathematics Subjects:

Calculus.
Predicate and boolean logic.
Discrete mathematics, Linear algebra.
Statistics.
Quantitative Methods.
Physics.

Organizations:

Competitive Programming Seminar.

4 Skills and Tools

- Proficient with algorithmic thinking and problem solving
- Most experience using: C++, Java (Desktop and Android),
- Moderate experience with database programming and design using: *MySQL*
- Moderate experience with web programming and design using: *HTML, JavaScipt.*
- Moderate experience with continuous integration using: *Jenkins.*
- Moderate experience with code quality analyzers using: *SonarQube.*
- Basic experience with mobile programming and design using: *iOS with Swift.*
- Basic experience with web programming and design using: *Ruby on Rails.*
- Basic experience with unit tests using: *JUnit, AndroidTestCase, XCTest.*
- Basic experience with distributed computing using: *MPI.*
- Tools I feel comfortable with: Git Version Control, Atom text editor, SVN Version Control.
- Operating Systems: Windows, Xubuntu, Mac OS.
- Learning for university projects: Assembler.

5 Work Experience

2013 - 2014	Part Mobile Development Team of Duing App
	I was part of the Development of Duing App, Duing is a social application for mobile devices. My team developed the Android native application for Duing, I focused mainly in consume data from Web Services and management of mobile databases, I had to be really careful, because that application save a lot of user data so aspects like memory, energy and time was really important, all of this based in the UX principles, also I work with graphic interface. Now Duing change some aspects, and it is called Reportt.

2015 - Present	Part Mobile Development Area at Ceiba Software
	I'm part of Mobile Development Area at Ceiba Software located in Medellin, .

6 Projects

1. **BlackJack**: Game of BlackJack created with Java.
2. **Checkers**: Game of Checkers created with Java using Max/Min algorithm.
3. **FilaFacil**: A queue manager for Android, that is, request turns by mobile.
4. **CloudYa**: A Web Image Hosting Application developed in HTML5, CSS3, JavaScript and PHP.

5. **CoffeeStart**: CoffeeShop Cashier Application developed in Assembler.

6. **Numerical**: An Android application in order to interpret numerical functions and evaluate them with different numerical methods learned in the subject Numerical Methods.

7. **Graphics**: Java desktop app with different graphics methods to represent objects and change his properties(scale, rotate, etc).

8. **Nower**: App to recommend special offers based in the user location, the final user(Buyer) app was created in Android, Client (Stores) was created with HTML5 and Javascript with AngularJs and the BackEnd was created with Ruby on Rails.

9. **Programming Lab**: Software developed in C++ that receive a series of tasks descriptions in YAML format and a series of pipes that connect some specific jobs. The software will try to execute the connected jobs and it will show if the task could be completed and his result or could not be complete, doing the same task as if you run for example "echo hello world | c &".

10. **NOTE**: You can find some of those projects on my Github! https://github.com/EstebanFS

7   Languages

SPANISH: Native (Colombia)
ENGLISH: Advanced

8   Extra-Curricular Activities

- **Course "Data Structures and Algorithm II" - EAFIT University**
  Teacher Assistant:
  January 2015 - June 2015 (Six Months)
  I was the teacher assistant in the course "Data structures and algorithms II", my main aim was to help students to understand many algorithms and topics, explain why those topics are really important in the design of algorithms and how to pass theory into practice. Topics include graphs and their algorithms, complexity, search of patterns, basic dynamic programming, optimization, etc.

- **Competitive Programming Seminar - EAFIT University**
  Lecturer Assistant:
  January 2014 - Present
  I am one Competitive Programming Seminar coordinators in EAFIT University. My work is to explain and teach some topics, problems, and solutions, that's topics include graphs, dynamic programming, ad hoc solutions, greedy algorithms, etc, in order to help teams to improve theirs abilities in a real programming contest.
  Also I help introducing new people at programming world.

9 Extra-Curricular Courses

- **Data Structures and Algorithms - Coursera Specialization**

  - **Algorithmic Toolbox**
    State: Completed
    Chosen Programming Language: C++
    Summary: This course gives an introduction to different kind of algorithms (Divide and Conquer, Dynamic Programming, Greedy Algorithms, etc). The idea of the course is to provide the students with tools to affront different kind of problems and the best way to solve them.

  - **Data Structures**
    State: Completed
    Chosen Programming Language: C++
    Summary: This course gives a definition of many common data structures, including Arrays, Stacks, Trees, Dynamic Arrays, Priority Queues, Disjoint Sets, Binary Search Trees (Search Trees, AVL Trees, Splays Trees). Also, this course gives a good explanation about how those structures work and are implemented in the most common programming languages.

  - **Algorithms on Graphs**
    State: Completed
    Chosen Programming Language: C++
    Summary: This course gives a really good explanation about graphs and their properties, starting from how is the best way to represent them taking into account the number of nodes and edges, going through how to traverse a graph, find a shortest path and minimum spanning tree. Time and space complexity are the main factor of the described algorithms.

  - **Algorithms on Strings**
    State: Completed
    Chosen Programming Language: C++
    Summary: This course is oriented to Science and how to use string algorithms to solve many genetic problems. In this course one does see topics like Suffix Tree, Suffix Array, KMP and Burrows-Wheeler Transformation. Each module of the course give the complexity and how the algorithms were evolving from some previous one in order to improve time and memory.

  - **Advanced Algorithms and Complexity**
    In progress

  - **Assembling Genomes and Finding Disease-Causing Mutations - Final Project**

In progress

- - You can find more information about this course in the following link : [Data Structures And Algorithms Specialization](#)

- **Certified Scrum Developer (CSD)**
  State: Completed
  Dates: September 2015 - September 2017
  Certification Authority: Scrum Alliance

- **Developing Android Apps - Udacity**
  State: Free version completed
  Summary: That course offer a Basic/Intermediate level of Android programming, this course take special account in the main principles that each Android Programmer must know, that principles are described in the next lines.
  - **Views**: This course give a good explanation about views and their main features.

  - **Operating System** Features of Android operating system is one of the most important factor in this course, this course explain about battery, network, threads, etc. Features that you have to keep in mind if you want to create a good Android application.

  - **Consume of service:** Actually all kind of app need consume data from a web service, that's why this task is so important, in this course you learned about different ways to consume services, starting from AsynTask to Intent services.
  - **Storage data:** Store data is as important as consume service, that's why you have to special care in how and when you can store some user information, this course gives you tools to take a desitions about that, stating from your own SQL administrator class to Content provider.

10 Contests

- Participated at the 2012 Colombian Programming Contest ACIS REDIS.
- Participated at the 2014 Colombian Programming Contest ACIS REDIS.
- Participated at the 2015 Colombian Programming Contest ACIS REDIS.
- Participant at the 2016 Colombian Programming Contest ACIS REDIS.
- Participated at the ACM-ICPC South American-North Regionals, November 2014.
- Participated at the ACM-ICPC South American-North Regionals, November 2015.
- Participated in the Google Code Jam 2013, 2014 and 2015, 2016.

- Participated in the Facebook Hacker Cup 2015.
- Participated in several test contest made by CCPL and RPC(Red de programacion competitiva).
- Solving diferent kind of algorithmic problems in several online judges, such as, UVa, Codeforces, TopCoder, COJ. handle each Judge except TopCoder: EstebanFS handle Top Coder:estebanf01
- You can find some of those solutions in Competitive Programming repository on my Github! https://github.com/EstebanFS/Competitive-Programming

11 Achievements - School

- **Best Graduation Project, Neosistemas 2011**:
  I won with "Puzzle", a Contable Software, based in the problem of a little company.
- **Distincted Graduates, Neosistemas, 2011**
  Distinction with honors among graduates of my year