Adam Incera

(305) 878-7257
adam.incera@columbia.edu
https://github.com/aji2112

EDUCATION

2012 – Present | **Columbia University College of Engineering Class of 2016**
Major in **Computer Engineering**, minor in **Mechanical Engineering**
GPA: 3.40/4.00
Relevant Coursework:
- Computer Science – Computer Architecture; Operating Systems; Advanced Programming; Data Structures in Java; Discrete Math; Theory of Computation.
- Electrical Engineering – Embedded Systems; Electronic Circuits; Circuit Analysis; Signals and Systems; Fundamentals of Computer Systems.
- Other – Computer Graphics and Design; Fluid Mechanics; Mechanics of Solids; Statistics and Probability; Cryptography and Number Theory.

WORK EXPERIENCE

Summer 2015 | **Amazon Robotics** (North Reading, MA): **Software Engineering Intern**
- Used Three.js to build an interactive 3D visualizer modeling a container and all its contents
- Integrated visualizer into UI of existing internal Ember.js web application
- Wrote Java back end to make service calls and assemble and serve data to UI

Spring 2015 | **Teaching Assistant for Discrete Mathematics**
- Held weekly office hours, graded assignments and exams
- Helped students learn mathematical concepts fundamental to Computer Science including combinatorics, probability, cryptography, number theory, and graph theory.

Summer 2014 | **Gilt Groupe** (New York, NY): **Software Engineering intern**
- Built an API in Clojure to retrieve data from JIRA's REST API and extract useful information such as:
  o Mean issue lifespan
  o Number of unresolved issues per user
  o Length of time after which an issue will most likely never be resolved
- Published at https://github.com/aji2112/jiralytics

June 2014 – December 2014 | **Private tutor** in data structures, discrete math, programming in Java and C, calculus, and physics.

PROJECTS

RSA Box: An **FPGA** programmed to perform **hardware-accelerated RSA Encryption**. Built as a semester project for an Embedded Systems course in spring 2015 with a 4-person team. Primary responsibility was to first build a modular multiplication block and then design a datapath around it to create a modular exponentiation block, all in **SystemVerilog**. Report, presentation, and source code published at http://www.cs.columbia.edu/~sedwards/classes/2015/4840/index.html under the "Projects" header.

HTTP web server implemented in C. Built as an assignment for Advanced Programming in spring 2014.

TECHNICAL SKILLS

Programming languages: C, C++, SystemVerilog, MIPS assembly, *nix systems, Javascript, Matlab, Python, Java, Clojure.

Electrical Engineering Skills: SystemVerilog, digital and analog circuit design, bench-level test equipment, circuit debugging, circuit-level simulation tools, soldering.

Practical knowledge of **encryption algorithms** including RSA, ElGamal, and Elliptic Curve cryptosystems

Foreign Languages: Spanish (fluent), French (basic)