Samuel M. Frank

(205) 515-2634 • smf2147@columbia.edu

EDUCATION

Columbia University, Fu Foundation School of Engineering and Applied Sciences, New York, NY

- MS in Computer Science expected December of 2014, specializing in Machine Learning
- Current GPA of 4.33 (all grades of A+)

Columbia University, Columbia College, New York, NY

- B.A. in Math and Economics, May 2011
- GPA of 4.15
- Graduated Summa Cum Laude, Phi Beta Kappa, and with Departmental Honors in Mathematics

DEVELOPER EXPERIENCE

Meal Idea, New York, NY

Lead Developer

July 2013 - January 2014

- Developed an iPhone app, Meal Idea, with over 9,000 downloads from the iTunes app store.
- Designed algorithms to provide a social search engine for online recipes.
- Coded a Java server, an Objective-C front-end, and a MySQL database with a team of two other developers.
- Designed multiple web crawlers in order to update the app's database.
- Inaugural class member of the Columbia Entrepreneurship Lab, a co working incubator space sponsored by Columbia
- Crafted marketing and monetization strategies with co-developers.

LANGUAGES AND SKILLS

- Fluency in Python and Java
- Developer experience in Objective-C and MySQL.
- Proficient in a Linux environment
- Wrote the curriculum for an introductory programming course in Java.
- Familiarity with JavaScript, C, HTML and CSS.

TEACHING EXPERIENCE

Teach for America, Greater Newark Region, NJ

Teacher of Programming and Mathematics

September 2011 – June 2013

- Selected from a competitive pool to teach Mathematics at a low-income public school for two years.
- Taught Java, Precalculus, and test prep at Passaic High School.
- Designed and implemented a new course, "Introduction to Programming in Java".
- Achieved 75% and 65% pass rates on the New Jersey HSPA graduation exam, compared to 50% school wide.

Double Discovery Center, New York, NY

Teacher

Tutor

October 2010 – December 2010

- Taught weekly classes to 20 high school students in Trigonometry.
- Designed curriculum, wrote and administered tests, and assigned final grades.

September 2008 – May 2011

- Tutored low-income high school students with academic potential twice a week.
- Provided general homework help, focusing on math and science, as well as college admissions mentoring.

Residential Teaching Assistant

June 2008 – August 2008

- Facilitated discussions, reviewed homework, and assisted students with class assignments in Geometry.
- Supervised activities such as swimming and filmmaking, and enforced dormitory rules.

RESEARCH EXPERIENCE

Columbia University Mathematics Department, New York, NY

Researcher

June 2009 – August 2009

- Conducted independent research in geometry under the supervision of Professor Dylan Thurston.
- One of two authors of "New Classes of Counterexamples to Hendrickson's Global Rigidity Conjecture", published in Journal of Discrete and Computational Geometry, Vol. 45, No. 3, April 2011: 574-591.
- Presented at Columbia Science Research Symposium, an undergraduate forum to present research in science.
- Paper cited in a peer-reviewed article in the Journal of Combinatorial Theory.