Eshan Agarwal

1065, 70 Morningside Drive, New York, NY, 10027 agarwal.eshan@columbia.edu • 302-650-9456 • eshanagarwal.github.io

EDUCATION

Columbia University, School of Engineering and Applied Science

2015 - 2019

- Major: Computer Science
- Egleston Scholar (Top 1% of Engineering Applicants in Entering Class)
- GPA: 3.87

TECHNICAL SKILLS

Skills: Java, C, Javascript, HTML, CSS, AngularJS, Node, Objective-C, Unity, Play Framework, PHP, SQL, Mongo **Previous Coursework**: Data Structures in Java, Advanced Programming in C, Fundamentals of Computer Systems **Current Coursework**: Operating Systems, Linear Algebra, Discrete Mathematics, Probability and Statistics

WORK EXPERIENCE

SmartAsset, Software Development Intern; New York, NY

5/16 — 8/16

- Initiated migration to service-oriented backend architecture using Netflix Eureka for service discovery, middle-tier load balancing, and fault protection
- Built tools for SEO optimization and partner outreach for business development team
- Created system of load tests for evaluating scalability of services and gathering performance metrics

Columbia Laboratory for Intelligent Imaging and Neural Computing

1/2016 — 8/16

Undergraduate Researcher; New York, NY

- Working with team of three to develop a real-time brain-computer interface system that operates in virtual reality
- Integrated open-source software solutions for synchronized streaming and real-time processing of several data outlets including EEG, Oculus, and eye-tracking data sources

MathPlus, LLC, Head Teaching Assistant; Newark, DE

8/2011 — 8/2015

- Aided up to eight students at a time in topics including simple to advanced algebra, geometry, trigonometry, and fundamental problem solving techniques
- Received offers from parents for private tutoring sessions based on positive reviews from students

Charter School of Wilmington HCI Lab, Researcher; Wilmington, DE

1/2012 - 10/2014

• Co-authored three publications on using adaptive and verbal technologies in the classroom and on gender-based perceptions of computer science among pre-collegiate students (Abstracts: http://goo.gl/J6EUBz)

PROJECTS

Bites, Co-founder

10/2015 — Present

- Developed a hybrid mobile app for college students to sell home-cooked meals to other students on college campuses as an alternative to dining hall food
- Won second place at Columbia's undergraduate fast-pitch competition and was selected as a finalist at the Columbia Venture Competition (seven selected out of more than eighty)

Class Projects 1/2016 — 5/2016

- Created a functional HTTP web server with additional database server from ground up in C
- Wrote a sorting program using only MIPS assembly code

Flip, Personal Project

5/2013 - 1/2014

- Designed and developed an iPhone studying application incorporating speech recognition and customized adaptive algorithms for school research project
- Experiments in real classroom environment showed improved long term retention of material when tested against traditional flashcards
- Published app research at the 2014 AACE World Conference on E-Learning

CSWConnect, Personal Project

1/2012 — 4/2012

• Created a mobile app to help organize classroom resources for high school, earned 650 downloads with a school population of 950