

# Varun Jain

Current Address: 4046 Chestnut Street, Philadelphia, PA 19104

E-mail: [javarun@wharton.upenn.edu](mailto:javarun@wharton.upenn.edu)

Telephone: (732)-547-4054

Website: [ivarun987.github.io](http://ivarun987.github.io)

## EDUCATION

### University of Pennsylvania, *Philadelphia, PA*

Expected Graduation: May 2019

- GPA: 3.6/4.0 | Major GPA: 3.8/4.0
- The Wharton School: B.S.E with Concentration in Statistics
- The School of Engineering and Applied Science: B.S.E in Computer Science, Minor in Mathematics
- Awards: 2<sup>nd</sup> Place: Deloitte Case Competition (2017); Dean's List: Engineering (2016-17), College of Arts & Sciences (2016-17)
- Relevant Coursework: Artificial Intelligence, Corporate Finance, Derivatives, Data Structures & Algorithms, Scalable Computing, Investment Management, Machine Learning

### Allentown High School, *Allentown, NJ*

Sept 2011 – June 2015

- GPA: 4.41/4.0 – Valedictorian | SAT: 2290 | ACT Math & Science: 36/36

## WORK EXPERIENCE

### Riskval Financial Solutions – *Quantitative Research and Developer Intern* | New York City, NY

June 2017 – Aug 2017

- Modeled and ran statistics on how future financial and macroeconomic events could affect the future of the company
- Developed new features for the fixed income trading platform to let traders have customizable layouts

### Coursalytics Inc. – *Data Scientist Intern* | Washington, D.C.

June 2016 – Aug 2016

- Refactored codebase to prepare for scaling up for an executive level course search website for more than 1000 users
- Analyzed data using the machine learning technique of k-means clustering, to both correlate course location and student success and optimize course coverage and location using Python and R

### Knowt – *Co-Founder/Database Engineer* | East Brunswick, NJ

July 2016 – Present

- Designed an algorithm that takes unstructured notes and converts them to object–subject sentences
- Helped expand an Android application for note-taking to handle more users and web interconnectivity

### University of Pennsylvania – *ENGR 105 Teaching Assistant* | Philadelphia, PA

Jan 2016 – Present

- For 3 semesters, taught a computer science course focusing on dynamics and optimization with the MATLAB language

## PROJECTS

### Mathkinz – *Co-Founder, Web Developer* | Millstone, NJ

June 2008 – Aug 2016

- Built a website and designed hundreds of worksheets for students, grades K-8 to help practice and learn new math concepts
- Organized two regional math competitions with upwards of 300 students

### Optimata – *Senior Design Project Freshman Mentee* | Philadelphia, PA

Feb 2016 – April 2016

- Designed a web application to create hedged portfolios based on both human and financial capital using the Bureau of Labor Statistics API, Amazon AWS, Python, SQL, and Node.js

## EXTRACURRICULARS AND LEADERSHIP

### Phi Gamma Nu Business Fraternity – *Master of Information Technology, Rush Chair, Social Chair*

Sept 2016 – Present

- Strengthened website security while fending off an attack from a hacker and designed a stronger website
- Planned and managed recruitment process of the most accomplished candidates into the fraternity

### Society of Asian Scientists and Engineers – *Treasurer and Website Designer*

June 2016 – Aug 2016

- Created an interactive website for the club that included member spotlights and club activities
- Managed expenses of club and ran a fundraiser that made a \$900 profit

## RESEARCH EXPERIENCE

### University of Pennsylvania – *Penn Undergraduate Research Mentee* | Philadelphia, PA

May 2016 – Aug 2016

- Wrote a theoretical mathematics research paper entitled “Finding Relations between Solutions of First Order Linear Differential Equations” with Professor Michael Wibmer
- Learned about abstract algebra, group theory, Galois theory and applications to dynamic models

### University of Pennsylvania – *Research Assistant* | Philadelphia, PA

June 2014 – Aug 2014

- Wrote a theoretical quantum chemistry paper on the polarization of LiNO<sub>3</sub> using cluster computing
- Worked with Director of the VIPER dual degree program, Dr. Andrew Rappe

## SKILLS

**Programming Languages:** Java, Python, C/C++, OCaml, SQL, x86 Assembly, MATLAB, R, HTML, CSS, JavaScript, AJAX, Git

**Big Data + Web Frameworks:** PANDAS, Hadoop, NoSQL, DynamoDB, Amazon AWS, Node.js, Django, Flask

**Other Tools:** RSA Encryption, Bloomberg Terminal, Cryptanalysis, Network Security, Arduino, LaTeX, Solidworks 3D Modeling

## ADDITIONAL INFORMATION

**Volunteer Activities:** P.E.E.R. Asian American Mentoring Program, Ronald McDonald, FIRST Lego League

**Other Involvements:** Princeton Advisory Group Consultant, Audio Engineer for Concert Setup Committee

**Interests:** Artificial Intelligence, Origami, 3D Polyhedra, Piano, Hiking, Skiing, Stephen King, Electronic Music