Nathan Dalal

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EDUCATION

B.S. in Computer Science, Stanford University	The Harker School
GPA **3.7** Overall	GPA 4.35; SAT: 2300
Expected Graduation: June 2019	Graduated May 2015

EXPERIENCE

Software Engineer, Mallick Lab, Palo Alto, CA   Summer 2015 - Current
- Began project work as a summer intern at the Canary Center at Stanford.
- Designed and built a prototype from scratch for a database forum website for biomarkers using NodeJS and MySQL.
- Currently assembling team to deploy live website for user testing.

Research Intern, Stanford School of Medicine, Stanford, CA   Summer 2014
- Employed linear modeling in R for oncogenetic expression analysis for the Gevaert Lab in the Stanford Institutes of Medicine Summer Research Program (SIMR).
- Combined copy number and methylation clusters as gene expression predictors to create more accurate predictive models for 24.5% of cancer-causing genes.

Teacher's Assistant, The Harker School, San Jose, CA   2014-15
- First TA in the Harker Computer Science department.
- Graded tests, wrote problems, and assisted students with Java programs.

COURSE Projects

Disjoint Set Forest, CS 106B, Stanford University, Stanford, CA   2015
- Augmented Kruskal's algorithm for maze generation using a disjoint set forest.
- DSF outpaces vector implementation by over 600% on 160x160 maze graphs.

PASCAL Compiler and Interpreter, The Harker School, San Jose, CA   2015
- Assembled a recursive descent parser in Java that compiles PASCAL to MIPS instructions and interprets it to console.
- Supports functions, scope, integer data type, and user I/O.

Multilayer Neural Network, The Harker School, San Jose, CA   2014
- Constructed a perceptron neural network using Java that trains on images.
- Designed for achieving optical character recognition and facial recognition.
- Trained to under 1% error for classifying character images by their ASCII values.

CREATIVE Outlets

Creator, Soto House Website   2015
- Created quick markup website to send info from Dorm Government to residents.
- URL : http://bit.do/soto19

Designer, Golden State Warriors Chrome Theme   2015
- Designed and deployed to the Chrome Web Store with 30,000+ users.
- URL : http://bit.do/warriors_theme

Programming Experience

Proficiency In:	**Java, C++, NodeJS**
Familiar With:	C, SQL, R, CSS3
Coursework Taken:	Paradigms, Probability, Math Foundations, Abstractions