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Nathan Dalal

www.nathandalal.com github.com/nathandalal

EDUCATION

Stanford University

September 2015 — June 2019 (expected)
M.S. Computer Science (Artificial Intelligence)

B.S. Computer Science (Information), minor Education

The Harker School

August 2011 — May 2015 GPA 4.35, SAT: 2300

Love of Learning Award

Relevant Coursework

Deep Learning Deep Learning, Generative Models CS 230, CS 236 Aut 2017, Aut 2018 AI Background CS 229, CS 221 Aut 2016, Aut 2017 ML, AI **Education and Teaching** Intro CS TA, Intro Education CS 198, ED 101 Present, Aut 2016 Core CS Background Operating Systems, Algorithms CS 140, CS 161 Spr 2018, Win 2017

Industry Experience

Robinhood
Data Engineering Intern (Data Team — Menlo Park, CA)

Summer 2018 Spark, Kafka, AWS

• Supplied key user metrics faster with serverless ETL jobs, eliminating cross-server joins and speeding up data inquiries

• Modernized Robinhood's AWS Glue "data lake" infrastructure, built logging pipeline for stock news stream processing

MongoDB Summer 2017 Software Engineering Intern (Education Team — New York, NY) ReactJS, UX, Python, NodeJS

• Worked with CS4All, CSNYC, and NYC Dept of Education to create meaningful computer science units

• Built mean-median-mode.herokuapp.com, telegraph-unit.herokuapp.com, and polynomial.herokuapp.com

• User-tested with students, worked with teachers to create great educative experiences

Inria Spring 2017

Software Intern (Individual Project — Santiago, Chile)

RabbitMQ, Python, SSE

• Developed a proof of concept to visualize micro (bus) traffic in Santiago, working in a Spanish speaking environment

• Created consumers of client bus data, processed data with work queues, and streamed data with server-sent events

Gigster

Software Engineering Intern (Automation Team — San Francisco, CA)

ReactJS, NodeJS, MongoDB, Slack

 \bullet Fixed team sourcing process to generate network developer teams automatically, sped up sourcing times by over 50%

• Maintained internal LinkedIn and metrics dashboard for the Gigster network, indexing and filtering with ElasticSearch

Bioinformatics Labs Summer 2014, Summer 2015

Research Intern (Mallick Lab, Gevaert Lab — Palo Alto, CA)

NodeJS, SQL, R

• Designed and built a prototype from scratch for a database forum website for biomarkers

• Used combinatorial linear models to better predict 24.5% of cancer-causing gene expression

Passion Projects

CS198 Section Leading Program

Fall 2016 — Present

Senior Section Leader (TA)

Java, C++

- For six quarters, taught introductory CS curriculum (CS 106A/B/X), held office hours, and graded homework and exams
- Offered a lesson on educational teaching theory to other section leaders which will be added to the CS 198 training

Stanford Machine Learning Group (Professor Andrew Ng)

Winter — Spring 2018

Student Researcher

NLP, Deep Learning, TensorFlow

- Helped develop <u>crio.stanford.edu</u>, a grammatical error correction project using neural machine translation
- Developed domain adaptation methods and set up a user data pipeline to personalize model results with Tensor2Tensor

Education As Society (EAST) House

Fall 2017 — Present

House Staff, Technology

Resident Computer Consultant (RCC)

• Creating strong and caring environment for upperclassmen as dorm staff member at east.stanford.edu

• Organized education technology conference, planned education-themed events, and automated house functions

Stanford Center for Education Policy Analysis

Fall 2017

Researcher

Deep Learning, TensorFlow, Education

• Training recurrent neural networks as an early warning indicator to predict dropout and performance in high school students

• As part of Deep Learning course in Fall, continuing work with Professor Ben Domingue and SF Unified School District

South Asian Identity and Side Projects

Fall 2015 — Present Airtable, Slack, Squarespace, Chrome

President @ Sanskriti, Singer @ Raagapella, Other

- Organize events for over 600 people as the leader of South Asian cultural organization Sanskriti (sanskriti.stanford.edu)
- Developed signup process for auditions and callbacks at raagapella.com that pings our Slack channel
- Redesigned National Association for People Against Bullying (NAPAB) from before to now at napab.org
- Maintain a Golden State Warriors Chrome theme between 20,000 70,000 users

Se habla español.