Adith Balamurugan

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EDUCATION

U.C. BERKELEY
M.S. IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE
Signal Processing & Computer Vision
Expected May 2019 | Berkeley, CA
Cum. GPA: 4.0 / 4.0

BACHELORS IN COMPUTER SCIENCE
BACHELORS IN STATISTICS
Conferred May 2018 | Berkeley, CA
Quantedge Award for Academic Excellence, 2016-17
Kraft Award for Freshmen, 2015-16
Dean's List
Cum. GPA: 3.861 / 4.0

TEXAS ACADEMY OF MATH AND SCIENCE (TAMS)
(UNIVERSITY OF NORTH TEXAS)
Grad. May 2015 | Denton, TX
Summer Research Scholarship
National Merit Finalist
President's List
Cum. GPA: 4.0 / 4.0

COURSEWORK

UNDERGRADUATE
Real Analysis
Data Structures
Machine Structures
Discrete Math & Probability Theory
Artificial Intelligence
Efficient Algorithms
Database Management
Machine Learning
Combinatorics & Randomized Algorithms
Operating Systems
Game Theory
Time Series

GRADUATE
Optimization Models
Deep Reinforcement Learning
Virtual Reality & Immersive Computing

SKILLS

PROGRAMMING
Frequent Use:
Python • Java • Git • LaTeX • Unix • R
Tensorflow • C++
Proficient:
C • C# • SQL/Databases • Node
HTML • CSS • JS

EXPERIENCE

VISA INC. | DATA SCIENCE INTERN | NEXT-GEN OPERATION PRODUCTS
June 2018 – August 2018 | Foster City, CA
- Automated and generalized feature engineering part of ML pipeline with automatic feature selection and model evaluation
- Created and evaluated functions to glean categorical and temporal pattern/insights from "performance monitoring" time series data, collected from 3.3+ billion cardholders and thousands of clients

JCPENNEY | DIGITAL ANALYST + BIG DATA INTERN
June 2016 – August 2016 | Plano, TX
- Worked with Big Data Scrum team on Market Basket Analysis for the ".com" channel using analytic tools such as Datameer
- Analysis on Customer Order trends to power more intelligent product suggestions and recommendations

UNIVERSITY / RESEARCH

IMAGE AND VIDEO PROCESSING LAB | RESEARCH ASSISTANT
April 2017 – Present | Berkeley, CA
Research with Dr. Avideh Zakhor focused in image processing. Collaboration with researchers in UIUC and Cornell. One-Shot and Few-Shot Learning Development
- Determine width/height of certain crops from provided images and distances
- Building and improving an RCNN for object recognition in images.
- Achieve high object classification accuracy with limited training size

DATA 8 | TEACHING ASSISTANT
August 2017 – May 2018 | Berkeley, CA
Responsibilities include course development, running lab/discussion section, and holding office hours.

STATISTICS 88 | HEAD TEACHING ASSISTANT
August 2016 – December 2016 | Berkeley, CA
Worked with Professor Alexander D'Amour . Responsibilities included holding office hours, editing course text, and writing and grading assignments and quizzes.

3D TELE-IMMERSION LAB | RESEARCH ASSISTANT
May 2014 – August 2014 | Richardson, TX (University of Texas, Dallas)
Researched with Dr. Balakrishnan Prabhakaran . Worked with Microsoft Kinect and Visual Studio, using C++ and C# programming with Unity. Explored the areas for improvement in remote medical practice using skeleton and mesh interactions in virtual space.

PROJECTS

SIGNNET | END-TO-END ASL TO TEXT TRANSLATION
INFO 259 - NLP | August 2018 - December 2018 | Berkeley, CA
Leverages Tensorflow and Keras to handle video data of speaker performing American Sign Language and encodes the 5 key components of ASL signs to output highest likelihood text translation for given sequence

ALLPAY | SECURE CLIENT-SIDE PAYMENT GATEWAY | FINALIST
Money 20/20 Hackathon | October 2015 | Las Vegas, NV
Payment gateway using Vantiv API which works alongside shopping systems and accepts any mobile wallet.