Deeban Ramalingam

Current Address
2690 152nd Ave NE, Unit 745, Redmond, WA, USA 98052
Permanent Address
17988 Navarra Ln, Morgan Hill, CA, USA 95037

Personal
rdeeban@gmail.com
Mobile Phone Number
+1 (208) 484 - 0360

EDUCATION

Cornell University (Aug 2014 - May 2018)
B.S. Computer Science, with Departmental Honors, *Cum Laude Designation*
Minor in Pure Mathematics
Meinig Family Cornell National Scholar
McMullen Cornell Engineering Dean Scholar
Thomas Dinwoodie McMullen Scholar

Relevant Coursework
Computer Science
Artificial Intelligence, Machine Learning, Computer Vision (Graduate-level), Natural Language Processing, Algorithms, Operating Systems

Electrical and Computer Engineering
Signals and System Analysis, Probability and Random Signals, Digital Signal Image Processing

Mathematics
Linear Algebra, Differential Equations, Multivariable Calculus, Stochastic Processes

Research Interests
Machine Learning (applications in Cloud Computing, Computer Vision, Audio Recognition, Healthcare, and Economics), Networked Distributed Systems and Cloud Computing

SOCIETIES / HONORS

Meinig Family Cornell National Scholar (approx. 50 students selected/yr) Aug 2014-May 2018
McMullen Cornell Eng. Dean Scholar (approx. 50 students selected/yr) Aug 2014-May 2018
Thomas Dinwoodie McMullen Scholar (1 student selected/yr) Sep 2017-May 2018
Dean's List for High GPA (5 times)
Golden Key International Honor Society (awarded to top 15% of graduating class)

RESEARCH / INDUSTRIAL EXPERIENCE

Microsoft Azure Networking R&D, Redmond, WA Aug 2018 - present
Software Engineer under *Mr. Shekhar Agarwal*
- Developing software for the networking infrastructure of the Microsoft Azure cloud

Microsoft Azure Networking R&D, Redmond, WA May 2017 - Aug 2017
Software Engineer (Intern) under Mr. Geoff Outhred
- Designed Multi-tenant Container-based Application Layer Load Balancing as a Service (*https://goo.gl/pu25TN*), presented to Azure Networking
- Proof-of-concept trumped existing application load balancers in functionality and speed

NVIDIA, Santa Clara, CA May 2016 - Aug 2016
Software Engineer (Intern) under Mr. Vijay Ramadoss
- Designed debugging tool to communicate with HyperVisors on NVIDIA Grid Network (NGN) cloud compute clusters
- Designed automation pipeline to handle efficient deployments to storage nodes in NGN

Hewlett-Packard R&D Lab, Boise, ID May 2015 - Aug 2015
Software Engineer (Intern) under Mr. Roger Baird

- JetAdvantage Management (JAM) allows customers to centrally, remotely manage their fleet of print devices over a network
- Developed feature for JAM that allows customers to make changes to the configuration of any JAM client, critical for effective communication between JAM in the cloud and JAM client within customer corporate firewall

Cornell University, Ithaca, NY Jan 2015 - May 2015
Undergraduate Researcher under Dr. Graeme Bailey (Now at University of Oxford, U.K.)
Masters in Engineering Project: Media Enabled Research Interface and Database (MERID)

- MERID enables researchers to run surveys and research investigations with respondents
- Investigations dealt with the subtleties of inter-orchestral communication between musicians during a performance / research was done jointly with University of Oxford
- Designed real-time broadcaster/subscriber event-driven communication framework

WhiteCloud Analytics, Boise, ID Jun 2014 - Aug 2014
Software Engineer (Intern) under Mr. Tim Ramey

- Developed software to complement hospital administration and healthcare analytics

Idaho Digital Learning Academy, Boise, ID Feb 2012 - Jun 2014
Software Engineer (Intern) under Mr. Ryan Gravette

- Presented educational software to the Idaho Senate Committee of Education, received letter of recommendation from senator (*https://goo.gl/fUpCac*)

NOTABLE COURSE PROJECTS

CS 6670: Graduate-level Computer Vision, Ithaca, NY Aug 2017 - Dec 2017
Unsupervised Image-to-Image Translation, course taught by Dr. Bharath Hariharan

- Explored unsupervised methods for non-linear low dimensional invariant feature space mappings for images

CS 4701: Artificial Intelligence Practicum, Ithaca, NY Mar 2017 - May 2017
Neural Approach to Song Recognition, course taught by *Dr. Haym Hirsh*

- Explored deep representation learning in the domain of complicated audio signals
- Designed non-conventional convolutional neural network to recognize name of song given few-second clip of the song in raw audio waveform
- Neural model outperformed Shazam's audio-fingerprinting algorithm in space and time complexity and duration of clip needed to make confident prediction (*https://goo.gl/TnaZeQ*)

CS 1610: Computing in the Arts, Ithaca, NY Nov 2014 - Dec 2014
Discovering Institutional Relationships among Research Papers using Map-Reduce Paradigm, course taught by Dr. Graeme Bailey

- Designed distributed map-reduce job to produce similarity graph of papers and discovered how connectivity of graph illustrated patterns in institutional co-authorship

EXTRA-CURRICULAR ACTIVITIES

Cornell Data Science Project Team Jan 2016 - Dec 2016
Team Lead, Project Manager

- Led team to design platform to collect student academic and extra-curricular schedule data to be used by AI system to optimize future scheduling plans

HOBBIES

Reading latest computer science-related papers, spending time with family, teaching CS and math concepts to younger brother and friends, chess (won past state / national tournaments)