

## EDUCATION

- **Carnegie Mellon University** Pittsburgh, PA  
*Master of Computer Science in Language Technologies* August 2011
- **University of Texas at Arlington** Arlington, TX  
*Bachelor of Science in Software Engineering & Physics (double major)* May 2009

## WORK EXPERIENCE

- **Snap, Inc. (formerly Snapchat)** Seattle, WA  
*Manager + Tech Lead, Machine Learning Engineering. Previously Software Engineer (Core Engineering)* June 2016 - Present
  - Driving the technical road maps of multiple projects involving large scale multimedia retrieval, audio understanding, NLP and computer vision; leading projects, mentoring engineers, and providing technical guidance to partner teams
  - Launched scan module in lens studio which allows users to scan objects, places, cars and dogs in the world with a massive database of item labels within community created Snapchat augmented reality experiences / lenses
  - Launched numerous high profile scan camera integrations with partners like Coca-cola, McDonald's, NBA, United Nations, Louis Vuitton, Too Faced Cosmetics, L.A. Rams, TurboVote, Ralph Lauren, Cheetos, Art Basel
  - Authored architectural & algorithmic improvements to content based information retrieval systems powering scan image search & other related use cases; decreased index training time by 95%, expanded search capabilities by 100x
  - Authored infrastructure for large scale approximate neighbor search, content understanding & dataset collection
  - Primary contributor of multiple deep learning models powering lens recommendations (scene tagging, sky segmentation, hand detection); improved average precision of logo detector models used at Snap by 54%
  - Contributed to backend and iOS / Android apps for context cards, widgets, search, chat, notifications & friending
- **Amazon.com, Inc.** Seattle, WA  
*Software Development Engineer II* Sept 2011 - June 2016
  - Led development of a product de-duplication system that continuously improves Amazon.com catalog quality
  - Contributed catalog validation logic & matching criteria; launched over 30 new Amazon.com product categories
- **Carnegie Mellon University** Pittsburgh, PA  
*Graduate Research Assistant* Jan 2010 - August 2011
  - Conducted research in natural language processing & educational computing applications; resulted in 8 publications
- **Space and Naval Warfare Systems Command (SPAWAR)** San Diego, CA  
*Naval Research Enterprise Intern* May 2009 - Aug 2009
  - Designed experiments & developed text classifiers for use on military chat posts. Results published in ICMLA

## SELECT TALKS &amp; PUBLICATIONS (3 INDUSTRY TALKS, 12 ACADEMIC PAPERS, 400+ CITATIONS)

- **Open-Vocabulary Object Detection Using Captions** CVPR  
*A Zareian, K Dela Rosa, DH Hu, SF Chang* 2021
- **MLOps at Snapchat: Continuous Machine Learning with Kubeflow & Spinnaker** Kubecon  
*K Dela Rosa* 2020
- **Build accurate training datasets with Amazon SageMaker Ground Truth** AWS re:Invent  
*V Madan, K Dela Rosa* 2019
- **Adding intelligence to your JS applications** CascadiaJS  
*K Dela Rosa* 2015
- **Self-assessment in the REAP tutor: knowledge, interest, motivation, & learning** Journal of AI in Education  
*K Dela Rosa, M Eskenazi* 2013
- **Topical Clustering of Tweets** ACM SIGIR Workshop on Social Web & Mining  
*K Dela Rosa, R Shah, B Lin, A Gershman, R Frederking* 2011
- **The advection of supergranules by the Sun's axisymmetric flows** Astrophysical Journal  
*DH Hathaway, PE Williams, K Dela Rosa, M Cuntz* 2010
- **Text classification methodologies applied to micro-text in military chat** ICMLA  
*K Dela Rosa, J Ellen* 2009

## SKILLS &amp; TECHNOLOGIES

- **Coding:** Python, Java, JavaScript, Go **Cloud:** AWS, Google Cloud, Docker, Kubernetes
- **Machine Learning:** TensorFlow, PyTorch, Kubeflow **Big Data:** Apache Spark, Airflow, Beam