



JAKE BUGLIONE

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PROFILE

5+ years of research and development experience in computer vision, machine learning, and data processing.

Proven experience developing and deploying large-scale, innovative, visual search and machine learning solutions for clients.

Results oriented leader with a track record of successfully guiding client driven visual search projects from inception to deployment.

Strong ML Fundamentals, expert in TensorFlow from design to production with solid programming skills.

SKILLS

Deep Learning
Machine Learning
Computer Vision
Tensorflow
Keras
Python
Java
C/C#
Open CV
GCP

EXPERIENCE

SENIOR MACHINE LEARNING ENGINEER • SLYCE • 2018 –

- Designed and implemented cutting edge, convolutional neural network based, visual product search algorithms.
- Maintained and improved these systems currently servicing over 1 million requests per month via scalable cloud platforms.
- Orchestrated collection and processing of data to facilitate creation of the above systems as well as RCNN based object detectors.
- Created a deep metric learning system for kiosks that identifies hardware from retailers such as Home Depot and NAPA .
- Conducted research into metric learning and learning to rank systems and their application in product search.
- Conducted research using word2vec and BERT techniques to facilitate unsupervised deep image caption systems.

SOFTWARE ENGINEER • CHI SYSTEMS • 2016 – 2018

- Developed computer human interaction data analysis and decision-making framework for NASA.
- Conducted research regarding a system to derive actionable data regarding vector-borne diseases from remote sensing datasets.

RESEARCH INTERN • PRINCETON UNIV. • SUMMERS 2012 - 2013

- Led an undergraduate team in building an autonomous aerial vehicle sensor platform.
- Improved an automated gas sensor system using spatial and temporal measurements and data analytics.

EDUCATION

M. E. ROBOTICS • 2016 • UNIV. OF PENNSYLVANIA

Thesis: Use of Compton Backscatter X-Ray Imaging in Agriculture
Focus Areas: Data Analysis, Computer Vision, Machine Learning

B. S. ELECTRICAL ENGINEERING • 2014 • VILLANOVA UNIVERSITY

Minors in Computer Science and Japanese
Graduated Cum Laude and Villanova Endowed Scholar
Capstone Project: Software Based Automated Satellite Tracker