

stevenwerner

computer (neuro) scientist

contact

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programming

♥ Java Python & Bash
PHP JS jQuery JSP
Scala MatLab
Visual Basic AutoIt
VXML L^AT_EX

full stack

git maven gradle
Redmine Jira Gerrit
Jenkins GitLab
Kube Rancher
Spring B/D/C
Docker AWS
spark bootstrap

data

♥ SPARQL & RDF
TF, PyTorch, pandas
Ontologies
PostgreSQL
solr Hibernate

editors

♥ IntelliJ Vim
pyCharm jupyter
netbeans Eclipse

operating systems

♥ CentOS Linux & Mac
Windows w/ linux

languages

Native English
Elementary Spanish

experience

2018-Present **Raytheon: Intelligence and Space** (Interim TS Clearance) Richardson, TX
Science & Technology: Principal Software Engineer & Data Scientist

- *Invention review board AI/ML NLP SME*
- *Collaboration Awards: Data & ETL Project Lead for TITAN & DCGS-A CD1*
- *Innovation Award: Attributed Point Pattern matching & Route Analytics*
- *Patent Award: Question Answering Models in Closed Domains*
- *Authors and Inventors Award: from the IIS Innovation Center for exceptional design architecture and implementation contributions to an Internal Research and Development project in my first 6 months*

2014-2018 **Lymba Corporation** Richardson, TX
Product Manager/Software Engineer
Natural Language Processing and Research: knowledge extraction, topic classification, information retrieval & question answering

- Fill many roles: applications architect, team leader, developer, presenter
- Hands on all aspect development, data retrieval, pre-processing, back-end & front-end design and implementation

2012-2014 **Interactive Systems Group (ISG)** University of Texas at El Paso
Undergraduate Research Assistant
Researched the utility of prosody in spoken information retrieval.

- Developed a prosody based audio search application (Didi-Sidekick)
- Improved on distance similarity model using linear regression
- Joined lexical and prosodic models using raw probability estimates

publications

Text Analytics **Knowledge extraction for literature review** JLDC 2016
Tatiana Erekhinskaya, Mithun Balakrishna, Marta Tatu, Steven Werner, Dan Moldovan

Automatic Extraction of Actionable Knowledge ICSC 2016
Marta Tatu, Mithun Balakrishna, Steven Werner, Tatiana Erekhinskaya, Dan Moldovan.

Q A **K-Extractor: Automatic Knowledge Extraction for Hybrid Question Answering** ICSC 2016
Mithun Balakrishna, Steven Werner, Marta Tatu, Tatiana Erekhinskaya, Dan Moldovan

Semantic Question Answering on Big Data SBD 2016
Marta Tatu, Steven Werner, Mithun Balakrishna, Tatiana Erekhinskaya, Dan Moldovan.

Info Retrieval **Evaluating Prosody-Based Similarity Models for Information Retrieval** MediaEval 2013
Steven D. Werner, Nigel G. Ward.

The Similar Segments in Social Speech Task MediaEval 2013
Nigel G. Ward, Steven D. Werner, David G. Novick, Elizabeth E. Shriberg, Catharine Oertel, Louis-Philippe Morency, Tatsuya Kawahara.

Using Dialog-Activity Similarity for Spoken Utterance Retrieval InterSpeech 2013
Nigel G. Ward, Steven D. Werner. 1569-1573

A Prosody-Based Vector-Space Model of Dialog Activity for Information Retrieval
Speech Communication
Nigel G. Ward, Steven D. Werner, Fernando Garcia, Emilio Sanchis.

old projects

gh://StevenWernerCS

Zulu

Minecraft Malmo
Towards bio-realistic
neural networks

SenQual 2013

Weather Data
Anomaly Detection
Web Application

MIPS emulator 2013

decodes asm2machine
executes instructions
updates registers

8bit Controller 2012

Nintendo puck on USB
Serial port comms

Money Clock 2010

Counted money made
instead of time past

MineSeeperBeater 2005

bot visually plays with
mouse moves/clicks
my first script

references

professional

Dr. Mithun Balakrishna
Lymba Director of
Research and
Engineering
mithun@lymba.com
Richardson, TX

research

Dr. Nigel Ward
ISG Advisor
UTEP CS Professor
nigel@utep.edu
El Paso, TX

peer

Dr. Shreyas Karkhedkar
ISG Labmate / TA
Google Analytics
karkhedkar.shreyas@
gmail.com
Mountain View, CA

education

2022	Masters in Applied Cognition and Neuroscience GPA: 3.89 (In progress) <ul style="list-style-type: none">Computational Modeling/Intelligent Systems Specialization Area	University of Texas at Dallas
2013	Bachelors in Computer Science Major GPA: 3.7, Overall GPA: 3.3 <ul style="list-style-type: none">Selected for the <i>NSF Research Experience for Undergraduates Program</i>	University of Texas at El Paso
2011	Computer Engineering Signals & Systems, Digital Circuits Engineering & C Programming	King Mongkut's University of Technology at Thonburi, Bangkok
2008	Associates of Mathematics Overall GPA: 3.5	El Paso Community College, Texas

other experience

2010–2011	KBR, Al Asad Air Base <i>Aviation Fuels Accountant (Security clearance: SECRET)</i> Responsible for maintaining accountability records of all KBR's fuel on airfield. (Capacity of 795,000 Gallons of JP-8 jet fuel) <i>KBR Star Award</i> : Increased efficiency & accuracy of Fuels Accounting Office. <ul style="list-style-type: none">Within 2 months of assignment developed automated forms and reports through MS Word/Excel/Outlook automation with Visual Basic.Automated records aided in identifying meter errors well before calibration date requirements <i>KBR Appreciation Award</i> x3: Perfect fuel accounting audit scores	Al Asad, An Abar Province, Iraq
2008–2010	Mesilla Valley Transportation <i>Over The Road Driver</i> Approx. 300,000 commercial miles driven. No accidents, no incidents, virtually no supervision. Drivers Education: Commercial Drivers License: Tanker, Doubles/Triples <ul style="list-style-type: none">Mesilla Valley Transportation Institute 2008 El Paso, Texas– Highest GPA of class	El Paso, Texas
2005–2006	CAI Tutoring Lab, El Paso Community College <i>Certified All Level Math/Physics Tutor</i> Unstructured setting: one on one, few on one & large groups.	El Paso, Texas
2003–2009	900th Quartermaster Company, United States Army Reserves <i>Petroleum Supply Specialist E-4</i> STATUS: Honorably Discharged <ul style="list-style-type: none">Battalion Soldier of the Year 2005Army Achievement Medalx4 Served as unit's acting Communications Sergeant <ul style="list-style-type: none">Maintained SINCGARS other military communications equipment. Military Education includes: <ul style="list-style-type: none">2008 Ft. Irwin, CA: U.S. Army Certified Combat Lifesaver<ul style="list-style-type: none">Trained in Casualty First Aid, including administering an IV2004 Ft. Lee, VA: AIT MOS 77F/92F Distinguished Honor Graduate– Highest GPA of class	El Paso, Texas

interests

professional: general artificial intelligence, bio-realistic neural networks, information retrieval, big data representation, neuroscience, blockchain, quantum computing **personal**: traveling, camping, hiking, percussion, tutoring, dirt biking, mobile app development