# stevenwerner computer (neuro) scientist

#### contact

In://StevenWernerCS tw://StevenWernerCS fb://StevenWernerCS StevenWernerCS.com

### languages

Native English Elementary Spanish

### programming

♥ Java Bash & Python PHP JS jQuery JSP Scala C++ MatLab Visual Basic Autolt VXML LATEX

# operating systems

CentOS Linux & Mac Windows w/ cygwin

## full stack

maven git redmine Gerrit Jenkins GitLab solr spark Spring B/D/C docker AWS bootstrap

#### database

SPARQL & RDF **PostGreSQL** Hibernate

#### editors

Intellij Vim netbeans Eclipse

# **experience**

2018-Present Raytheon: Intelligence, Information Services

Science & Technology: Software Engineer II

ML/DL based Natural Language Processing: knowledge extraction, topic classification, information retrieval, document similarity & question answering

• 2018 Authors and Inventors Award recipient from the IIS Innovation Center for design architecture and implementation contributions to an Internal Research and Development project in my first 6 months

Richardson, TX

Richardson, TX

JLDC 2016

ICSC 2016

ICSC 2016

University of Texas at El Paso

2014-2018 **Lymba Corporation** 

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, backend & front-end design and implementation

2012-2014 **Interactive Systems Group (ISG)** 

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**

QA

Info Retrieval

Text Analitics Knowledge extraction for literature review

Tatiana Erekhinskaya, Mithun Balakrishna, Marta Tatu, Steven Werner, Dan Moldovan

**Automatic Extraction of Actionable Knowledge** 

Marta Tatu, Mithun Balakrishna, Steven Werner, Tatiana Erekhinskaya, Dan Moldovan.

K-Extractor: Automatic Knowledge Extraction for Hybrid Question Answering

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.

Evaluating Prosody-Based Similarity Models for Information Retrieval Media Eval 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.

### projects

gh://StevenWernerCS

#### SenQual 2013

Weather Data Anomaly Detection Web Application

#### MIPS emulator 2013

decodes asm2machine executes instructions updates registers

#### didi-Sidekick 2012

Prosody Based Query-By-Example Info Retrieval System

#### 8bit Controller 2012

Nintendo puck on USB Serial port comm simulates keystrokes

#### Money Clock 2010

Counted money made instead of time past

#### MineSeeperBeater 2005

bot visually plays with mouse moves/clicks my first script

#### references

#### research

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

#### academic

Dr. Ann Gates Senior Project Mentor UTEP CS Chair agates@utep.edu El Paso, TX

#### peer

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

# education

Ongoing	<ul><li>Masters in Applied Cognition and Neuros</li><li>GPA: TBD</li><li>Computational Modeling/Intelligent</li></ul>	
2013	Bachelors in Computer Science Major GPA: 3.7, Overall GPA: 3.3  ■ Selected for the NSF Research Exp	University of Texas at El Paso perience for Undergraduates Program
2011	Study Abroad King Mongkut's Signals & Systems, Digital Circuits Engin	S University of Technology at Thonburi, Bangkok eering & C Programming
2008	<b>Associates</b> of Mathematics	El Paso Community College, Texas

# other experience

2010-2011 KBR, Al Asad Air Base

Overall GPA: 3.5

Al Asad, An Abar Province, Iraq

El Paso, Texas

El Paso, Texas

El Paso, Texas

Aviation Fuels Accountant (Security clearance: SECRET)

Responsible for maintaining accountability records of all KBR's fuel on airfield. (Capacity of 795,000 Gallons of JP-8 jet fuel)

KBR Star Award: Increased efficiency & accuracy of the Fuels Accounting Office.

• Within 2 months of assignment developed automated forms and reports through MS Word/Excel/Outlook automation with Visual Basic.

**KBR Appreciation Award**x3: Perfect fuel accounting audit scores.

• 3 consecutive quarters.

2008-2010 **Mesilla Valley Transportation** 

Over The Road Driver

Approx. 300,000 commercial miles driven.

No accidents, no incidents, virtually no supervision.

Drivers Education: Commercial Drivers License: Tanker, Doubles/Triples

- Mesilla Valley Transportation Institute 2008 El Paso, Texas
  - Highest GPA of class

#### 2005-2006 **CAI Tutoring Lab, El Paso Community College**

Certified All Level Math/Physics Tutor

Unstructured setting: one on one, few on one & large groups.

2003-2009 900th Quartermaster Company, United States Army Reserves

> Petroleum Supply Specialist E-4 STATUS: Honorably Discharged

- Battalion Soldier of the Year 2005
- Army Achievement Medal×4

Served as unit's acting Communications Sergeant

• Maintained SINCGARS other military communications equipment.

Military Education includes:

- 2008 Ft. Irwin, CA: U.S. Army Certified Combat Lifesaver
  - Trained in Casualty First Aid, including administering an IV
- 2004 Ft. Lee, VA: AIT MOS 77F/92F Distinguished Honor Graduate
  - Highest GPA of class

# 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