

Digital Operatives

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- ▶ Veteran-Owned Small Business, founded in 2005, based in Arlington, VA
- ▶ Cyber security technology and services firm specializing in **advanced research and development of asymmetric technology** solutions that **scale** to solve societal problems
- ▶ Digital Operatives is a **diversified company of Computer Scientists, Researchers, Engineers, Hackers, and Subject Matter Experts** that **understand** the many **threats facing governments, corporations, and individuals** operating in the modern **information age**
- ▶ Our company vision is: "To bring revolutionary positive change to the status quo in the multi-dimensional world of technology"



Relevant Work and Existing Tech



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- *Contextual Semantic Analysis* (CSA) leverages the vast, semi-categorized, multilingual textual content of Wikipedia to create a *concept oracle* for efficient semantic search
- “Semantic role labeling without treebanks” (Brew, *et al.*, 2011)
 - Forests, not trees: no restriction to just one tree; data complemented by simple rules
 - **Extension:** Use *Universal Dependencies*; data covers many langs.
 - **Extension:** Use LSTMs, RNNs or similar; multi-task, part of model is shared cross-language; potentially generalize to unseen languages
- **Sentiment Analysis, Automatic Summarization, Cross-Language Translation, Cross-Domain Translation** (images, audio, video)
- “*Energy-Based Approach*” for creating specialized, human-generated *concept oracles*

Twitter: “Polamalu”



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[Troy Polamalu, football player]

Text Search

Found 5 results.

LitPark on December 31 2008 01:03am
... You are the Troy **Polamalu** of Twitter!

MekDot on December 14 2008 23:17pm
ed reed > troy **polamalu**. tell me i'm wrong.

kdka on December 06 2008 05:23am **Polamalu**
Listed As 'Probable' For Cowboys Game...

briandillon on December 28 2008 20:21pm
it's Roth..if only it had been Ward or **Polamalu**

iamnatassja on December 18 2008 02:56am
....cuz I'm lookin @ Troy **Polamalu**'s "stats" lol

Since the algorithms work in a unified *concept space*, cross-domain translation is straightforward. *I.e.*, search with a picture, get results in text, or *vice versa*

CSA Search

Found 26,626 results.

MekDot on December 14 2008 23:17pm
ed reed > troy **polamalu**. tell me i'm wrong.

LitPark on December 31 2008 01:03am
... You are the Troy **Polamalu** of Twitter!

kdka on December 06 2008 05:23am **Polamalu**
Listed As 'Probable' For Cowboys Game...

iamnatassja on December 18 2008 02:56am
lookin @ **Troy Polamalu**'s "stats" lol..tweet me urs..

briandillon on December 28 2008 20:21pm
it's Roth..if only it had been Ward or **Polamalu**

DatDudelke on January 04 2009 20:56pm
... Ed is the best all around, **Troy** is 2nd to me, despite

branandlee on December 21 2008 12:47pm
Headed to titans **steelers** game...been waiting...



Medline: “اختلال خونی”

[“blood disorder” in Farsi]

Text Search

Found 0 results.

Wikipedia’s translations automatically give us a multilingual mapping in our concept oracle; **over 100 languages supported**

CSA Search

Found 653 results.

[Hemophilia](#)

Hemophilia is a rare inherited disorder in which the blood does not clot normally...

[Bleeding Disorders](#)

Normally, if you get hurt, your body forms a blood clot to stop the bleeding. For blood to clot...

[Platelet Disorders](#)

Platelets are little pieces of blood cells. Platelets help wounds heal and prevent bleeding by forming...

[Blood Thinners](#)

If you have some kinds of heart or blood vessel disease, or if you have poor blood flow to your brain, your doctor may recommend that you take...

...

Example: Automatic Summarization



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Barack Obama

From Wikipedia, the free encyclopedia
(Redirected from Obama)

"Barack" and "Obama" redirect here. For other uses, see Barack (disambiguation) and Obama (disambiguation). For President Obama's father, the Kenyan American, see Barack Obama Sr.

Barack Hussein Obama II (/ˈbərɑːk huːseɪn oʊbɑːmɑː/) (born August 17, 1961) is the 44th and current President of the United States. He is the first African American to hold the office. In January 2005, Obama was sworn in as a U.S. Senator in the state of Illinois. He resigned in November 2008, when he resigned following the 2008 presidential election.

Born in Honolulu, Hawaii, Obama earned a Bachelor's degree from Harvard Law School, where he was a member of the Order of the Coif. He worked as a civil rights attorney and constitutional law at the University of Chicago Law School from 1995 to 2004. He served three terms representing Illinois in the U.S. Senate from 1997 to 2004.

Following an unsuccessful bid against the Democratic incumbent for a seat in the United States House of Representatives in 2002, Obama attracted national attention during the campaign, including his victory in the March 2004 Illinois Democratic primary for the Senate election and his keynote address at the Democratic National Convention in 2004. He was elected to the U.S. Senate in Illinois in November 2004. His presidential campaign began in February 2007, and after a close campaign in the 2008 Democratic Party presidential primaries against Hillary Rodham Clinton, he won his party's nomination. In the 2008 presidential election, he defeated Republican nominee John McCain, and was inaugurated as president on January 20, 2009. Nine months later, Obama was named the 2009 Nobel Peace Prize laureate. In April 2011, he announced that he would be running for re-election in 2012.

As president, Obama signed economic stimulus legislation in the form of the American Recovery and Reinvestment Act of 2009 and the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010.

9000
Words

Obama's parents, Barack Obama Sr. and Stanley Ann Dunham, were both students at the University of Hawaii at Hilo, where his father was a foreign student on scholarship. The couple married on February 2, 1961, separated when Obama Sr. went to Harvard Law School, and divorced in 1964. Obama's parents' marriage was troubled, and his father's infidelity was a source of tension. Obama Sr. was a member of the United States Air Force and worked for the United States Information Administration. He was a member of the United States Information Administration and worked for the United States Information Administration. He was a member of the United States Information Administration and worked for the United States Information Administration.

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