## SUSANNA COX

## EXECUTIVE SUMMARY

AIML, policy analysis, dataset design & engineering. Former lobbyist & ethical hacker. Multiple patents written. Startup veteran.

Thoughtful technical leadership at the intersections of security, artificial intelligence, & vulnerable populations.





## SENIOR INTELLIGENCE ANALYST & ARTIFICIAL INTELLIGENCE ARCHITECT





# MACHINE LEARNING / ARTIFICIAL INTELLIGENCE

#### HEAD OF MACHINE LEARNING

STEALTH STARTUP

Architected ethical & secure machine learning data collection and backend while in charge of product creation & research design at a bleeding-edge tech startup focused on revolutionizing digital education. Designed data collection within user interfaces across multiple products aimed at varying user groups. Implemented ethical data standards from UI to pipeline.

Six patents written in 1st year, including four technical & two design.

Led a working team of graduate students in a successful joint research project with the METALS program at Carnegie Melon University.

Directed engineering teams in Ukraine, Vietnam, and the US in the technical implementation of ML models and engines.

#### PRINCIPAL ENGINEER

#### INDIGENOUS ENGINEERING

Innovated multiple research projects leveraging machine learning, natural language processing & stakeholder networks into data insight with scaleable pipelines scraping social media platforms, creating custom unstructured datasets and corpora, & reporting results. Demonstrated wide application for population research.



#### SECURITY

#### SENIOR SECURITY ENGINEER

UNDISCLOSED

Leveraged knowledge of law enforcement, social media, financial, civil, kinetic & network security systems to evade a multi-agency manhunt for over a year, while working full time as an AIML engineer, leading research projects, and maintaining an active 10k-follower social media account.

#### SENIOR SECURITY ENGINEER

UNDISCLOSED

Led multinational vompany penetration testing by organizing large scale tests including kinetic, physical, and network security. Mass social engineering and social media manipulation with footprinting and research catalogues.



### POLICY

#### SENIOR POLICY ANALYST

CRITICAL ALLIANCE

Directed research & data acquisition and initialized Machine Learning for newly founded think tank. Created custom industry-actionable datasets and AIML modeling systems for policy areas ranging from agriculture to molecular physics to cybersecurity.

#### DIRECT LEGISLATIVE ACTION OPERATIVE

UNDISCLOSED

Staffed election & policy influence operations throughout the southern US and Washington DC. Legislator/government relations, organizing/training operatives, media ops. Coordinated legislative action. Led briefings to rapidly train civilian lobbyists in focused capitol hill efforts. Led press conferences & media events, wrote speeches, produced media packets and created press releases.



### TECH STACK

**Python** 

C/C++

**TensorFlow** 

Docker

Keras

**Pytorch** 

Seaborn

Matplotlib

**Pandas** 

Numpy

Linux (Debian)

Natural Language Toolkit (NLTK)

Gensim

Scikit-learn

Anaconda/Jupyter

Bash & Command Line Interface (CLI)

SQL

++



## LANGUAGES

Russian

German

French

Spanish

Hebrew



## ORGANIZATIONS

American Indian Science and Engineering Society (AISES)

Society of Women Engineers (SWE)

Phi Sigma Rho Engineering Sorority

IEEE Computer Society

Natives in Tech (NiT)



## POLICY HONORS

Oxford Scholar

State Champion, American Legion Oratory Contest

National Finalist, American Legion Oratory Contest

Girls State

Girls Nation Senator, Served As Attorney General

State Cross Examination (CX) Policy Debate Champion

YMCA Youth Assembly

**Teenpact National Congress** 



### EDUCATION

COMPUTER SCIENCE & MODERN LANGUAGES

GEORGIA INSTITUTE
OF TECHNOLOGY

PUBLIC SPEAKING, GRASSROOTS ORGANIZING & MEDIA RELATIONS

THE LEADERSHIP INSTITUTE, WASHINGTON DC



## SELECT WRITINGS

<u>Securing AIML Systems in the Age of Information Warfare</u>

A New Monroe Doctrine for the Law of Armed Conflict (LOAC) and the Use of Force in Cyberspace: Colonial Interests, US & Russian Expansionism, and The United States Doctrine

<u>Pre-Soviet Trajectories for Digital Warfare: Situating</u> the Early 2022 Ukraine Cyberattacks Within Russian-Leninist Information Warfare Analysis

Not Your Mascot: Opinions Vs Data

What Does it Mean to be Cherokee Online?