STAQU

Perceiving the future

A #startupindia Initiative

For Defence And Law Enforcement

For any query contact us at
info@staqu.com

ABOUT US

Founded in 2015, Staqu is a research-based startup, uniquely positioned to lead Artificial Intelligence in Indian Law Enforcement and Defense. With a proprietary AI technology stack comprising of advanced image and video analysis tools, language and text-independent speaker identification engine, speech recognition, facial recognition, and text processing APIs, Staqu has changed the way policing is done in various states.

With its products suite, policing in crime affected states such as Punjab and Uttar Pradesh has taken a predictive turn with forces making informed decisions and quick investigative actions through the PAIS and Trinetra applications. Within a year, Staqu has deployed its solutions across 8 states and has resulted in the capture of over 1100 criminals

Staqu is constantly pushing the boundaries of AI through research and filed for multiple patents. We constantly strive to better the research in the fields of text speech and image and our constant progress and excellence can be seen in the research papers being published in some of the leading conferences in the world. Staqu's Speaker Identification Engine is the worlds best speaker identification engine beating University of Oxford's accuracy by over 9%.

Our Partners

Uttar Pradesh Police

Uttarakhand Police

Punjab Police

Rajasthan Police

Telangana Police

Dubai Police

OUR EXPERIENCE & CREDENTIALS

02 Patents Granted

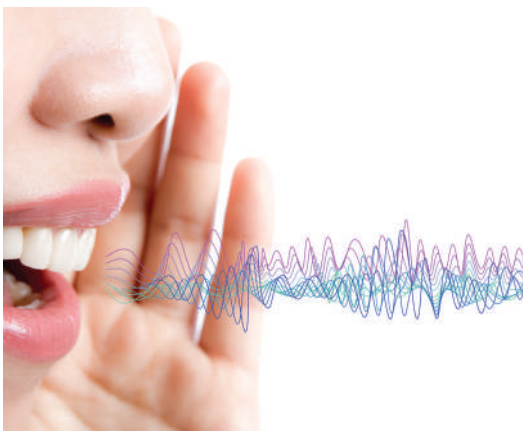
25+ Research Papers

ISCA Archive Interspeech 2018

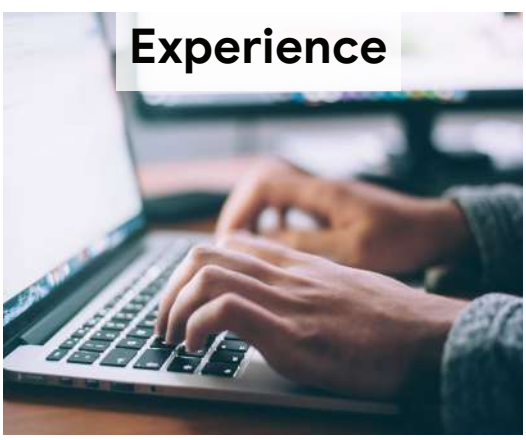
Learning Discriminative Features for Speaker Identific
Sarthak Yadav, Atul Rai

The success of any Text Independent Speaker Identification anc
discriminative features. In this paper we propose a Convolution
VGG [1] CNNs, with key modifications to accommodate variable
requirements and reduce the number of parameters, resulting
deep learning system for both Text-Independent Speaker Recog
architecture under the joint supervision of Softmax loss and Ce
suited for both Speaker Identification and Verification Tasks. We
hundreds of thousands of real world utterances of over 1200 ce
approach. Our best CNN model achieved a Top-1 accuracy of 8
training in conjunction with Center Loss improved the Top-1 ac
approach.

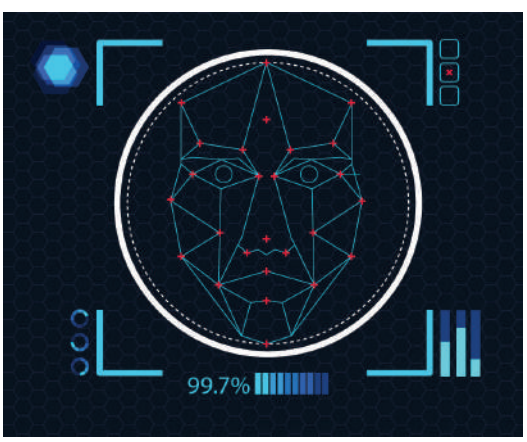
04 Research Publications In 2018



World's Best Speaker Identification Engine with **94.3%** accuracy on VoxCeleb



22+ years Combined experience of the team



Facial Recognition with more that **99%** accuracy in LFW Dataset, Youtube Faces and other Indian databases

OUR PRODUCTS

Police Artificial Intelligence System (PAIS)

PAIS allows police to digitize centralize criminal record via online and offline methods and enable self-acting criminal search at ground zero. its live with Uttar pradesh police, Uttarakhand police, Rajasthan police, Punjab police etc

Joint AI Research For Video Instances And Streams (JARVIS)

AI powered customisable video analytics engine for security and defence forces. Its live with UP Prison Administration and Reform Services, where video feed from 3000 camera from 70 different prisons are aggregated to perform video analytics for visitor identification, violence, intrusion etc.

Police Intelligence News Extractor (PINE)

The software is live with Telangana police and Punjab police. PINE allows law enforcement agencies to streamline security and information collection. It simplifies retrieving all the relevant and contextual information regarding an entity of interest, be it an organisation, person, or region from open sources.

Speaker Identification Using AI Networks (SIAN)

SIAN is an advanced AI technology to enroll and identify the Persons of Interest(POIs) uniquely through voice

Police Advanced Research And Analytics Solution (PARAS)

PARAS is the Big Data analytics platform. The software is live with some of the police forces and assist them to retrieve the information. Its secure big data analysis software specifically designed for law and enforcement agencies.

PAIS FEATURES

01

FACIAL RECOGNITION

Using an advanced Artificial Intelligence solution, this feature helps in identifying criminals through their face

02

TEXT SEARCH

Search based on criminal ID, Phone Number, Name and Address, and FIR details

03

DATA COLLECTION

Support data collection from SCRB, DCRB, CCTNS and UTMS etc. in real-time.

04

GANG ANALYSIS

It helps to find the link of a criminal with any gang.

05

BIOMETRIC RECORD

Compatible for adding and searching fingerprint and voice sample in future.

06

PHONETIC SEARCH

It can search a criminal with high accuracy even if his/her name is misspelled in database

07

DATA SYNC

You can auto save criminal data even when you go offline incidentally.

08

ALERTS

Nodal Officer broadcast information through alerts

09

SPEAKER IDENTIFICATION

Advanced AI tehnology to recognize and identify criminals etc. using their vioce sample criminals

10

AUDIO

Audio data of criminals gathered from different mobile operators , OSINT and already existing records.

JARVIS FEATURES

01

FACIAL RECOGNITION

Deep learning based state of the art Face Recognition technology capable of identifying a person via low resolution video feeds.

02

VIOLENCE DETECTION

Advanced AI technology that will automatically detect violent behaviour through already installed video surveillance cameras

03

INTRUSION DETECTION

Technology that will monitor traffic and different regions of interest for intruders and issue an alert to authorities when such activity occurs

04

ANPR

ANPR technology that automatically recognizes a vehicle using license plate and provide all registered details

05

CROWD ANALYSIS

Identifying sudden increase and decrease in crowd in certain controlled areas using video feeds and generating system wide alerts

06

FIRE DETECTION

Identifying smokeless fires and generating alarms across for faster response. Works without the need for additional sensors

07

SPEED, COLOUR AND DIRECTION OF ANY OBJECT

Movement and speed detection of using monocular vision

08

VIDEO AUDITING

AI powered auditing of long footages to automatically pick out the events of interest. Authorities can then watch the summarised video of events

09

VIDEO WALL

Completely modular video wall for easily viewing and monitoring thousands of cameras from a single location

10

SMART GLASSES BASED FACIAL RECOGNITION

Security on the go in VIP areas and areas with low network coverage

PINE FEATURES

01

SEARCH BY TAG

Customized tag creation for quick search and automated alerts

02

COMMENT, HIGHLIGHT, SAVE AND PRINT THE NEWS

Editable reporting for ease of reference

03

ALERTS

Desktop and mobile alerts for any subscribed updates

04

ONLINE DRIVE FOR SAVING NEWS

Cloud and on-premise folder management for storing and disseminating content

05

LANGUAGE INDEPENDENT SEARCH

Advanced translation engine for searching in multiple languages

06

ADMIN PANEL

Modular role management system for defining various levels of access

07

HOTSPOT ANALYSIS

Real time insight into the reported activities going on at any location for an eagle's eye view

08

TIME-SERIES ANALYSIS

Historical analysis and predictive capabilities for identifying trends in news, public activity and any other reported event

09

CO-OCCURRENCE ANALYSIS

Identifying links between different events through an AI powered big data analytics engine

SIAN FEATURES

01

SPEAKER IDENTIFICATION

Using an advanced Artificial Intelligence solution, this feature helps in identifying criminals through their voice.

02

SPEECH RECOGNITION

Hybrid noise robust end-to-end speech to text for transcribing audio in multiple international and regional languages under a wide variety of ambient noise conditions.

03

SPOOFING IDENTIFICATION

Identify mimicking attempts by frauds.

PARAS FEATURES

01

AI-POWERED SEARCH WITH CUSTOMIZED PARAMETERS FOR EACH AGENCY

02

DATA CREATION, DIGITIZATION AND STORING

03

ANALYTICS AND REPORTING SUITE

04

FILES AND FOLDER MANAGEMENT

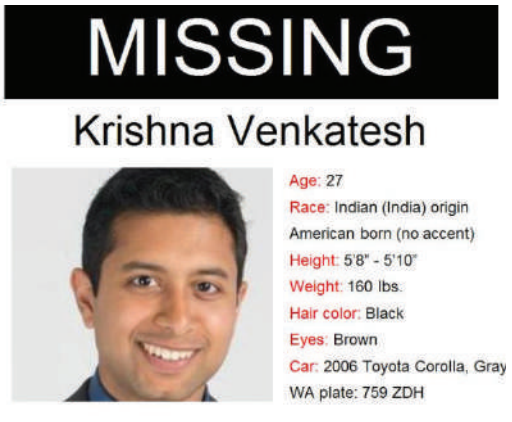
05

ADMIN PORTAL AND ROLE MANAGEMENT

06

LOGIN AND ACCESS MANAGEMENT

IMPACT

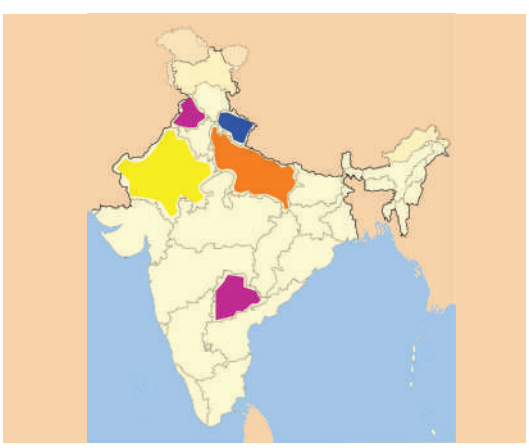


3341 Missing Person Registered

708997 Criminals Registered

11782 Police Officers Registered

1100+ Criminals Caught



05 Indian States Covered

08 Terrorist Modules Busted

DUBAI POLICE

Staqu and Dubai Police signing an MoU to incorporate Staqu's research stack into the day to day policing in Dubai and the rest of the UAE

Presentation to the head of National Services of the UAE on how Staqu's AI prowess can help in changing the defense and policing departments of UAE. Staqu presented predictive policing solutions that would help

Visit to the Smart Police Station in Dubai to identify how Staqu would become a core part of the policing system at Dubai

TRINETRA

Staqu launching its Trinetra application for state police to enable enhance criminal search and registration across all the police stations in Uttar Pradesh.

FINANCIAL EXPRESS
Read to Lead

UP Police launch 'Trinetra', its AI-powered face recognition app to catch criminals

CNBC TV18 LIVE TV

Entrepreneurship

This Gurugram-based startup is helping law enforcement agencies nab criminals with

BUSINESS INSIDER INDIA

Home › Business › EXCLUSIVE: This Indian Startup H

EXCLUSIVE: This Indian startup has made a profit solving 1,100 police cases with just one round of funding

TOI OPEN APP

SUNDAY TIMES

Now, police use apps to catch a criminal

Ketaki Desai | TNN | Updated: Mar 31, 2019, 18:03 IST

Live हिन्दुस्तान .com

लूटेरों की कुंडली खंगालने में 'स्कैच से पकड़ा गया कुख्यात बिट्टु

हिन्दुस्तान टीम,गाज़ियाबाद

Last updated: Wed, 13 Feb 2019 07:33 PM IST

livemint 99

The new crime buster: Tracking gait technology

10 min read . Updated: 04 Feb 2019, 08:34 AM IST

PAIS

Punjab Police receiving the Best Policing Award for PAIS by FICCI in 2018. PAIS has revolutionized the way crime investigation happens in the state through its integrated AI features.

HUFFPOST

TECH 16/08/2018 10:32 AM IST | Updated 16/08/2018 10:32 AM IST

Cops In India Are Using Artificial Inte That Can Identify You In a Crowd

Police departments want to link this to Aadhaar to widen the dragnet.

By Gopal Sathe

The Tribune

VOICE OF THE PEOPLE

TRIBUNEINDIA.COM

Cops develop face recognition app to nab gangsters

PATIALA: To counter the growing menace of gangsters in Punjab,

INDIAN ARMY

Staqu is working closely with the Indian Army to help in satellite imagery and war-time efforts through its proprietary image analytics engine.

With Staqu's Satellite Imagery Analysis module, the Indian Army will be able to detect and extract enemy vehicle positions and type. This will help in identifying the exact course of action and severity of strike by the armed forces.

ABHED

क्रिमिनल की पूरी जानकारी फोन पर ही मिल जाने से होती है बड़ी आसानी

अपराधी को ऐप के जरिए पकड़ रही पुलिस

Amit.mishra1@timesgroup.com

■ **नई दिल्ली :** भले ही आपको यह किसी हॉलिवुड फिल्म की कहानी लगे लेकिन अब पुलिस क्रिमिनल को एक खास ऐप के जरिए पकड़ रही है। इस तरह का पायलट प्रॉजेक्ट राजस्थान के अलवर और पंजाब के कई जिलों में चल रहा है। असल में अब तक किसी भी भगोड़े अपराधी की पहचान करने के लिए पुलिस के मुख्य डेटाबेस की मदद लेनी होती थी। इसमें काफी वक्त लगता था। इस तरह के फिजिकल डेटाबेस को मेंटेन करना भी चुनौती भरा था। ऐसे में अब आर्टिफिशल इंटेलिजेंस पर आधारित ऐसा क्राइम डेटाबेस तैयार किया गया है, जिसे ऐप के जरिए कहीं भी पुलिस इस्तेमाल कर सकती है और अपराधी की पूरी जानकारी ले सकती है। इसे बनाने वाली गुरुग्राम की कंपनी स्टैक्यू का कहना है कि जैसे-जैसे डेटाबेस बढ़ता जाएगा, काम और भी आसान होता जाएगा। अब तक पंजाब में 35 हजार अपराधियों का डेटाबेस तैयार किया जा चुका है। ऐप में अपराधी की फोटो, आवाज, फिंगरप्रिंट के साथ ही आवाज का सैंपल भी सेव रहता है। यह ऐप 4जी के साथ 2जी पर भी काम करता है। अलवर के एसपी राहुल प्रकाश का कहना है कि इससे काम में आसानी हो गई है। अब तक अलवर पुलिस 1000 अपराधियों तक ऐप के जरिए पहुंच चुकी है।

अभेद एप प्रणाली अपराधियों पर नियंत्रण की अभिनव पहल

अलवर । अलवर पुलिस ने आर्टिफिशियल इंटेलिजेंस संचालित अभेद एप का लांच किया। पुलिस अधीक्षक राहुल प्रकाश ने बताया कि अब तक राजस्थान पुलिस या अन्य किसी पुलिस एजेंसी के पास इस तरह का कोई सॉफ्टवेयर या साधन नहीं था कि सीसी टीवी या अन्य किसी तरह से प्राप्त मुल्जिम का कोई फोटो या घटना स्थल से हाथ प्रिंट मिल गया तो मौजूद डाटा बेस से किया जा सके अभेद देश और दुनिया में पहला ऐसा सॉफ्टवेयर एप्लिकेशन है जिसमें चेहरा, फिंगर प्रिंट और वॉइस तीनों के द्वारा पंजीकृत करने और पहचान करने की तकनीकी उपलब्ध है।

इस बाबत पुलिस अधीक्षक द्वारा अपने स्तर पर प्रयास कर भारत की अग्रणी आर्टिफिशियल टेलीजेंसी कंपनी स्टेकयू टेक्नोलॉजी से इस सॉफ्टवेयर का डवलपमेन्ट करवाया । अतिरिक्त पुलिस अधीक्षक पारस जैन समन्वय से अभेद सॉफ्टवेर का निर्माण कराया गया है जिसकी लॉन्चिंग जिला एवं सत्र न्यायाधीश हेमन्त जैन के द्वारा की गई। इस सॉफ्टवेयर की सबसे खास बात यह है कि यह एंड्रॉयड मोबाइल से संचालित हो सकेगा और थाना स्तर पर इंवेस्टिगेटिंग अधिकारी (आईओ) गूगल प्ले स्टोर से इसे डाउन लोड कर पाएंगे। पुलिस अधीक्षक राहुल प्रकाश ने कहा कि अलवर पुलिस को अभेद एप के रूप में एक ऐसा बेहद प्रभावशाली हथियार मिल गया है जिसके माध्यम से पुलिस देश व दुनिया में पहचान छुपाकर रह रहे शातिर से शातिर अपराधी को भी कानूनी शिकंजे में कस सकती है। अभेद एप के उपयोग के लिए पुलिस के पा अपराधी का फेटाए फिंगरी अथवा आवाज तीनों में से कि एक का होना आवश्यक है। कि तकनीक से बने अभेद ऐप पुलिस डाटा बैंक के रूप इस्तेमाल करेगी।

इसकी शुरूआत अल जिले से की जा रही है। अतिरि पुलिस अधीक्षक पारस जैन लगातार समन्वय से इस कि सापटवेयरका उपयोग अभेद ऐप निर्माण में किया गया। इस तरह ऐप अभी तक राजस्थान ही नहीं बल्कि अन्य पुलिस संस्थानों में भ है।

आने वाले समय अपराधियों की धरपकड़ में पुलि के लिए ब्रह्मास्त्र की तरह काम आ वाले विशेष एप अभेद की लॉन्चि शनिवार को जिला एवं से न्यायाधीश हेमंत जैन ने की।

ABHED has been institutional in solving crimes in **Rajasthan** in a timely and effective manner. **ABHED's** underlying technology is powered by **PAIS** and uses Staqu's AI prowess to aid police investigations.

AWARDS

Staqu being awarded by **Mr. Amitabh Kant**, CEO of NITI Aayog

Staqu receiving the award from Prince Edward on behalf of the British Government for excellence in the field of Artificial Intelligence

IAMAI awarding Staqu for its use of **Machine Learning** in **Homeland Security**

Staqu receving the award for being a **game changer in AI** by Centre of Excellence, Nasscom

OTHER RECOGNITIONS

Staqu getting recognized in the national media for its effort in aiding the law enforcement agencies across the country

TIMES OF INDIA

The Chase Gets a lot Easier for tech-wielding Cops now

Anjali Venugopalan
@timesgroup.com

New Delhi: It's not just lathis and guns for the police anymore. From algorithm-based apps that can identify gangs, to ones that gather information from breaking news, to cameras in lock-ups that set off an alarm when unusual movement is detected, the police are going increasingly high-tech in a bid to improve efficiency.

Instead of combing through old news reports and files to get information on a person or organisation, intelligence departments in Punjab are now using an app that generates in-

said Gurmeet Singh Chauhan, assistant inspector general (organised crime control unit), Punjab police.

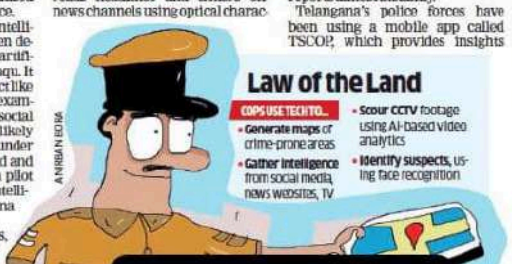
The app, called PINE (Police Intelligence News Extractor) has been developed by Gurugram-based artificial intelligence (AI) startup Staqu. It can analyse mentions of a subject like the Khalistan movement, for example, on news websites and social media to assess which areas are likely to be crime-prone, said Staqu founder Atul Rai. Police in Uttarakhand and UP have been using PINE on a pilot basis, said Rai, adding that intelligence departments in Telangana have also been using the app.

For developing situations, cops earlier had to manually

various channels. Now, the software reads headlines and tickers off news channels using optical charac-

ter recognition (OCR) and generates reports almost instantly.

Telangana's police forces have been using a mobile app called TSCOP, which provides insights



like which areas are times of the day are accident-prone, crime-prone or even water-logging prone using data analytics, said Ravi Gupta, additional deputy inspector general (technical services) of Telangana police.

It then generates "crime maps" using GIS (geographical information systems), which indicate which areas are more likely to experience eve-teasing or pick-pocketing, for example, he said. This helps the police plan which routes to patrol, and at what time. Gupta said there had been a reduction in crimes like pick-pocketing as a result.

The Delhi police also maps crimes, and additional deputy commissioner Shobhit Saxena said there has

number of night calls that report street crimes as a result, in the months since the system was implemented. The Delhi police has GPS-enabled bikes that track the route police patrol, he said.

The traditional image of police tying threads between various players to identify links is becoming obsolete. Staqu's app used by Uttar Pradesh, Uttarakhand, Punjab and Rajasthan combs through information and identify links between accomplices and helps them identify gangs.

Lock-ups in Delhi are also being enabled with cameras that can be programmed to set off a buzzer when unusual motion is detected at night, said Saxena. This can prevent pris-

CEO of staqu technologies, Mr. Atul Rai speaking in 11th India Security Summit organized by ASSOCHAM

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22 January 2018

Mr Atul Rai
Staqu Technologies, 301, JMD Regent Plaza Mall,
Mehrauli-Gurgaon Road, DLF Phase 1
Sector 26, Gurgaon, Haryana 122002, India

Dear Mr Rai,

Tech Rocketship Awards 2018

Many congratulations for being selected as one of the winners of the 2017-18 Tech Rocketship Awards. I am writing of course to congratulate you, but also to invite you to the winners' ceremony to be held at the UK-India CREATECH Summit in Mumbai.

Letter of recognition from the British Government to Staqu for being the best AI startup in India

TECH.ECONOMICTIMES.INDIATIMES.COM
Staqu builds an Android smart glass platform to help poli identify criminals - ETtech

Staqu builds an android smart glass platform to help police identify criminals - ETech

Mr. Atul Rai CEO and Cofounder at Staqu, got the invitation from British high commissioner to India Sir Dominic Asquith to speak about the work and AI technologies we are doing in Staqu.