

## **BAJAI Scientific Group provides customized solutions for automating electronic law enforcement and intelligence gathering.**

BAJAI employs technologies, developed by Ph. D. educated computer scientists, to engineer unique Intelligent Systems using Artificial Intelligence (AI), machine vision algorithms, classification technologies, and biometric sciences. From stripping subversive communications from steganographically encrypted images, to mathematically isolating images of children in electronic media, or to unleashing software robots onto the Internet to locate and engage potential predators in on-line conversations, BAJAI's scientists can help law enforcement and intelligence agencies survey the electronic world.

BAJAI's advanced systems are based on OCULAR™ and iajaBot™ proprietary technologies. **Online Content Classification, URL Labelling And Relegation (OCULA)** is a revolutionary vision based technology that automatically analyzes and classifies Internet content. OCULA utilizes advanced real-time **computer vision** techniques and the latest **artificial intelligence** algorithms to perform knowledge based reasoning to properly classify content. Based on heuristics, OCULA classifications are guaranteed to be consistent, predictable, and reliable. IajaBot is a data-mining robot that is constantly digging up new Internet content while learning about Internet topology and content commonalities. IajaBot can perform high-speed web operations and analyzes newsgroups.

The automation and speed of BAJAI's intelligent systems replaces the costly manual labour required for processing such vast amounts of data.

### **Scientific Areas of Expertise**

<b>Artificial Intelligence</b>	- Automated software robots can be trained for intricate patterns recognition	Internet chat room surveillance for Pedophiles
<b>Classification Technology</b>	- Automated robotic data mining of the Internet for data	Surveillance and Intelligence gathering tools
<b>Assess and Characterize On-Line Activity</b>	- Highlight inappropriate uses of computing resources.	Adult/sex or Hate content, Activity by Day/Hour, etc.
<b>Forensic Media Searches and Machine Vision</b>	- Scan electronic media on mass storage devices, data networks, or in email attachments	Child pornography on computer hard drives or in email files or network stores
<b>Cryptographic Technology</b>	- Strip hidden, encrypted messages from images	Steganographic messages in JPEG images.



### About BAJAI

**BAJAI Inc.** was formed in 2001, founded on the expertise of Ph. D. computer scientists who specialize in computer vision, and artificial intelligence classification theory, efficiency and graphing algorithms. BAJAI provides patented, technologically advanced solutions to our customers for Internet forensic and on-line activity management. Our customers utilize these solutions to effectively manage their Internet environments

**BAJAI Inc.** is an award winning Company that specializes in Online Activity Management (OAM) solutions. BAJAI Inc.'s products are the **most** effective because they are the **only** OAM solutions utilizing artificial intelligence to classify ALL electronic media, including text, images, movies and link relationships, meta tags, and rich media.

BAJAI's iajaBot™ robotic farm automatically classifies content 24 hours a day, every day. Tirelessly combing the web, the robots utilize OCULAR™ technology to continually create the most up-to-date and accurate web classification list available. OCULAR™ performs ON-THE-FLY image analysis, which eliminates the threats associated with newly posted offensive materials. Unfamiliar URL's are scanned for offensive images and blocked if they are deemed in violation of organizational policy. This ensures that BAJAI's characterization and classification methodologies provide the most protection from undesired content, with the least amount of misclassification. BAJAI's override privileges provide management with a tangible tool to assess user compliance when searching the Internet. The override capability also guarantees that productivity is not affected by a misclassification, or a rare need to access information generally not complying with policy.

**BAJAI Internet Forensics Services Group** provides forensic analysis of Internet activity and media storage device content. The services team also provides consultation during OAM implementation and policy development. Being uniquely qualified as award winning domain experts, BAJAI's services team is regularly called upon to discuss and present in the scientific and corporate community.

**BAJAI Scientific Group** provides customized solutions, based on OCULAR™ and iajaBot™ artificial intelligence technologies, for specialized applications in law enforcement and forensic security research. From stripping subversive communications from steganographically encrypted images, to training iajaBots™ to recognize children in electronic images, or to unleashing iajaBots™ to find and engage potential predators in on-line conversations to flush them out, BAJAI's scientist can help law enforcement agencies police the Internet.