Web-Based Data Processing For Environmental Surveillance Monitoring Applications

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Problem Formulation

How to present in an unified manner fundamental principles of signal processing theory, under an integrated computational and information processing environment, to assist/aid in the solution of environmental surveillance monitoring (ESM) applications.
Web Application Architecture

Model-Control-View Architecture

Browser

Controller
FacesServlet

Model
Operators
Beans

View
JSP Pages

Request

Response

Server (Apache Tomcat)

Model-Control-View Architecture

Client

Instantiate & Control

Redirect

Access
Application Tools

- J2EE (Java 2 Platform Enterprise Edition)
- Java Advanced Imaging API
- Java Image I/O
- Flanagan’s Java Library for complex arithmetic
- JavaServer Faces
- Apache Tomcat (Web server)
- JFreeChart (Open source API to make charts)
- J-FTP (For FTP connection of JMethods Inc.)
Research Results (JCID: Java Comp. Image Developer)