Cpsc 527 Project List

- **LIVES (Mobile Learning)** *(Learning through Interactive Voice Educational System)*
  - A alpha-beta prototype exits
  - Experimentation and Improvement of LIVES
  - Improve the LCMS
  - LIVES for multimedia content
  - Security
  - Correctness and Performance (stress - scalability) Testing

Cpsc 527 Project List

- **BlueI (Millennium Learning)** : Extension of BlueCT, a Class Response System *(via Bluetooth-WiFi)*:
  - Web-based version (for iPhone, Android G phone)
  - Grade recording, A/V Lecture recording and broadcast to local and remote clients
  - Slides (Questions) downloading from server and Feedback (answers) to (remote) students
  - Games for eLearning via BlueI with Laptop, PDA or handset clients (e.g. jeopardy +).
  - LePlaza and BlueI via BT handsets and WF laptops
  - David’s version (Java, RMI, XML): + Central Server
Cpsc 527 Project List

- **BlueCT and Peerwise (Millennium Learning):**
  - A Class Response System (Bluetooth- WiFi):
    - Integration of BlueCT and Peerwise.
    - Integration of BlueCT, Peerwise and/or LePlaza for enhanced e-Learning.

- **LePlaza:** Location-Based Social Network
  - Add mobile capability (for smart phones)
    - EventFinder implemented
    - Carpool application (implemented), others,…
  - GPS-based auto location update
  - Improve/enhance, e.g. with Video (e.g. interface with YouTube), academic customization.
  - Integrate with VPP (next slide)

- **LePlaza – Carpool and/or Dance Events in Vancouver via Cellphone**
Cpsc 527 Project List

- **Virtual Public Place (VPP):**
  - HD Video Streaming
  - Mobile devices – control and upload/download object
  - Integrate with LePlaza and Bluel (remote lecture)

Cpsc 527 Project List

- **Bit-Vampire:** P2P Video Streaming (Enhancements)
  - Experiment in real Internet environment (VBR codec and variable BW)
  - Enhance Search and DVD functionality
  - Using NEMO for intelligent management
  - User tracking for stat collection, performance enhancement, and incentive provision
  - Security (access control and privacy)
  - Wireless-BV: Proxy-BV for use with wireless devices e.g. Bluetooth handsets or WiFi laptop.
Cpsc 527 Project List

- **The Internet of Things**: a critical survey
- **RFID**: for tagging for identification and location detection
  - RFID-G2
  - WiFi-RFID
  - RFID applications in healthcare and elearning
  - Location detection
- **Social based networks for quality of life (fun, wellbeing)** – A framework and simple implementation

Cpsc 527 Project List

- **Mobile Agents (Wave/NEMO) and Applications**
  - Semantic search via mobile agents
  - Intelligent network management via mobile agents
  - LePlaza (Finding Buddies - user-profile matching)
  - Resource/Service Discovery
  - NEMO for intelligent management in sensor networks
    - Wiseman, sensor networks applied to coal mine emergency monitoring and management
  - RFID-G2
  - Other applications of mobile agents (e.g. distributed coordinated robotics)
Cpsc 527 Project List

- **MOPAR** (Mobile Object P2P Architecture).
  Location Based Middleware and Applications
  - Mobile Service/Resource Discovery
  - Tracking mobile users (via Google map) and mobile services (location based) (e.g. object/user locating – car in parking lot)
  - A simple application (Improve an existing emergency management system) (that could serve as an interesting, distributed game)
  - Implementation of MOPAR via Android phones

Cpsc 527 Project List

- **P2P Games (P2P Poker)**
  - Cheat prevention.
  - Architecture Development
  - Simple implementation
Cpsc 527 Project List

- Security
  - Mobile security (privacy protection for mobile devices) – implementation on Android phones
    - How to get at address books and track recent phone calls (in, out and missing calls, and SMS messages) and protection measures
  - Botnet Defense
    - DNA and mobile agent based approach

- Others (and your proposals)