



**BHADALE GROUP OF COMPANIES
- IT AND REAL ESTATE**



Mar 26 2018

AI Assisted Living

Bhadale IT Developers Pvt. Ltd | Bhadale Real Estate Developers Pvt. Ltd (registration due)

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Bhadale Group of Companies

Bhadale Group of Companies consists of Bhadale IT Developers Pvt. Ltd and Bhadale Real Estate Developers Pvt Ltd.

1. **Bhadale IT Developers Pvt. Ltd** is an IT and Computer Engineering company

This company provides consultation in areas of cutting edge technologies, research outsourcing, and software consultation related to data center and related engineering practices

2. **Bhadale Real Estate Developers Pvt. Ltd** is a Real estate company

This company provides development of Infrastructure for IT Datacenter and allied sectors. It manages the engineering design, landscaping, civil architecture, presently serving internal projects.

Bhadale Group of Companies has aggressive programs in place to serve the niche market.

Bhadale IT Developers Pvt. Ltd Programs and Services**IT Division programs**

- 1 Cloud Architecture
- 2 AI
- 3 Digital
- 4 Automation
- 5 R&D services
- 6 Engineering services
- 7 Mentoring Services
- 8 Data center services
- 9 Outsourcing

Below is one AI program offering named AI Assisted Living. This is in the vision state and we are developing the finer details. Latest details are available upon request.

AI Assisted Living

We are progressing into a newer paradigm of living and there are significant changes that are forecasted to happen in the coming years. AI being one the key technology player is being leveraged to make strategic decision and to gain advantages in several ways that can be harnessed for the betterment of the society and human living.

There are several points as to why AI is gaining such popularity and it is being researched, applied for several use cases from an individual to a larger society and economies. Below are few points I feel are the main purpose of using AI

1. Assist humans in expanding their vision that is limited to a small set of data that will enable them to take right decisions at right time and avoid over expenses
2. Assist Governments in finding the root cause of their debts and identifying all types of culprits that are present in the society and country that will enable policy makers, regulators, Income tax departments, Anti-corruption squads and many more unknown social evils and malpractices

3. Assist the human resource development in identifying the key weak chains in human development, wrong funding, under-employment, deprivation of right to employment, rejection of right resources due to various social evils like racism, religion, origins, skin color etc
4. Assist humans in verifying the value add-of existing policies and budgets that might not be effective due to social evils and favoritisms, politics and racist policies followed at all stages of human development, corporate employment and misuse of funds.
5. Provide automation through robotics and reduction in repetitive tasks that humans do not find any interest or boring.
6. Help Planners in designing predictive models that will help reduce crime and in timely resolutions to victims
7. Help Law makers in correlating the whole legal system and finding hidden caveats, weak rules and help in updating / removal of acts that give wrong decisions and punish the right
8. Help humans in their day to day life in doing simple routine jobs of cleaning, serving, typing etc

There are several other factors that will help humans; however AI should be used for the betterment and not for any evil ends.

We at Bhadale IT have several ideas, solutions and roadmaps for our clients that can help them in making a right choice and progress on the right path without having to continue on the legacy path. We assure you that you will feel the difference. Technology is available to help you in harnessing it as per your missions, goals and visions and there is no need for you to be a slave of the technology.

Below sections provide details of our services catalogue related to AI. We have helped several clients in their research work and also project works related to robotics and automation. These are generic in nature to enable design of canonical models and tailor them to project needs.

Service details for Bhadale IT Developers Pvt. Ltd

IT Division programs – Artificial Intelligence

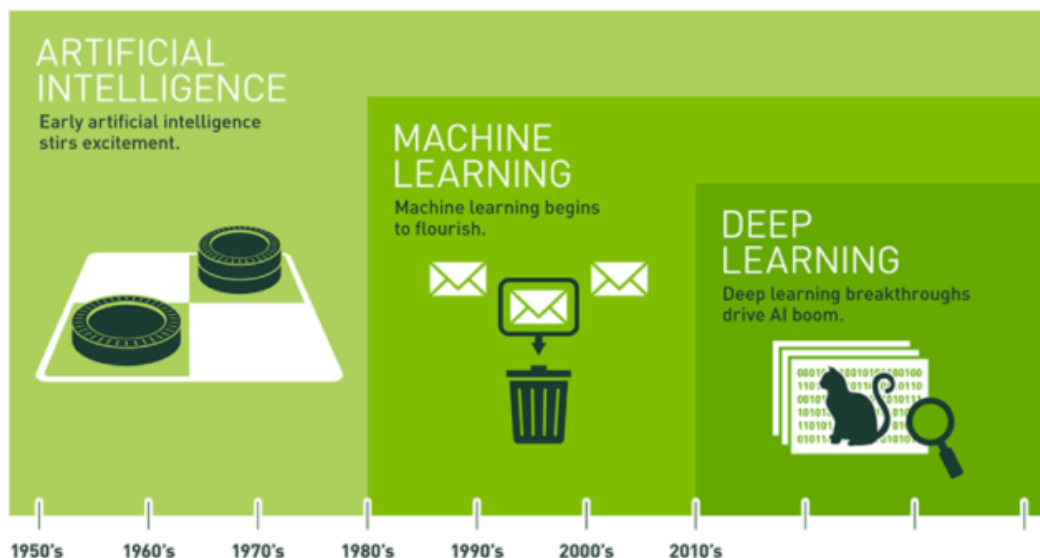


Image Courtesy (The web)

Program No	Program Name	Key Program features
1	Artificial intelligence, advanced machine learning, Deep Learning using NN(Supervised & Unsupervised)	<p>NLP, ML (Supervised & Unsupervised) and Deep learning using Neural Network projects are tasked for enterprise needs using the Common framework/ services given below, along with unique project tools of the products like JADE, Eclipse, API from IBM, MSFT, Amazon, Google and mobiles.</p> <p>Program leverages the various deep learning architectures such as deep neural networks, convolutional deep neural networks, deep belief networks and recurrent neural networks that are applied to fields including computer vision, automatic speech recognition, natural language processing, audio recognition and bioinformatics where they produce results comparable to and in some cases superior to human experts</p>
2	Intelligent applications, Intelligent things	<p>These are based on AI and ML and AI aware applications are developed based on the available platforms using our Common framework/ services given below, that adhere to international standards like IEC 61850, ISO, NIST , GE, Cisco, Ericsson, Smart Grid, Intelligent monitory, Low power IoT , Big data field computing, Cloud computing, Newer Protocol like ZigBee. Development of Intelligent society of AI agents that live, work and report like humans which are Ambient intelligent agents. Prototypes for AI –enabled enterprises using above protocols and having SDK/toolkits/ accelerators can be leveraged for demo purposes for specific project, enterprise program, Technical platform and utility, smart home, smart factory etc</p>
3	Conversational systems(Chats, Bots, Expert systems)	<p>These are based on AI and ML and AI aware systems are developed based on the available platforms using our Common framework/ services given below for man-machine conversations (real and live voice/ speech recognitions), machine-machine conversations-M2M mainly based on IoT offline chatting/ near live for fog computing, adhering to specific domain based taxonomy and ontology / dictionaries. Ex. Simple ones - Banking Teller machine, Petrol vending robot, Help desk robot; Complex ones- Robo Cops, reservation systems, Interactive car guidance.</p> <p>Use of standard API to integrate single/multi modal interfaces for the specific project, robo unit, assembly line or enterprise unit that will be able to be more lively by getting the conversational part into it. Standards used are, ISO 26262, ISO 15504 (Automotive SPICE), and IEC 61508</p> <p>Use of Apple's Siri, MSFT Cortana , GE, Google products</p>
4	Mesh app and service architecture	<p>These are based on AI and ML and AI aware systems are developed based on the available platforms using our</p>

		<p>Common framework/ services given below. Design of solutions that link, mobile apps, web apps, desktop apps and IoT apps – and their data, whether user or operational – into a broad mesh of back-end services to create what users view as the “Application.” MASA designs are means faster, collaborative, cloud-based technology.</p> <p>Use of REST APIs, Micro services, Pylm(Python based), HW/SW/NW interfaces to connect the Mesh of the IoT enabled devices that interact, connect and exchange information to ensure the mesh is actively engaged in serving it front end consumers. Services will be more abstract than the SOA, REST, SOAP or even Service bus based.</p>
5	Adaptive security architecture	<p>These are based on AI and ML and AI aware systems are developed based on the available platforms using our Common framework/ services given below. The adaptive security management architecture (ASMA) topology consists of real to near to real time active AI agents that scan and find historical bugs, traces and passive and active threats and intrusions. The agents use predictive analytics to interpolate and forecast the possible threats based on early history. The framework works and ensures the internal integrity and known bugs, worms and avoids large scale casualties. They also act proactively on finding patterns of data related activities based on files, emails, traffic, and fingerprinting of the resources by hackers</p> <p>The Info sec base will be guided by ITIL, CEH, CISSP domains and the AI interfaces will integrate and interact with various security enabled data layers like DMZ, OS Security rings and hardware security. Any compromising, suspicious activities will first be tackled and later logging and emailing follows.</p> <p>Adaptive Security will be more flexible in dealing with new and threats from unknown/new sources that target loop holes in newer technology protocols. There will be clear and unbiased database of hacks from internal hacker and there will be continuous feedback to the DEEP Learning AI Agents that will learn, adapt and be war ready to threats not know to external world.</p> <p>Our unique knowledge and experience can help keeping the risks to a minimum.</p>

CATALOG OF COMMON IT FRAMEWORK / SERVICES OFFERED for all five AI programs listed above

Service No	Service Name	Services offered
1	AI Enterprise Architecture	<p>Enterprise architecture based on “The AI Alliances Ecosystem Models”, Enterprise 4.0 that helps mature in AI market and capitalize your market segments.</p> <p>Analyze AI enterprise, define models and, architect AI frameworks (based on AI alliances, agent societies) for business processes and infrastructure of the company’s operating model(DevOps, InfoSec, KPI, Balance score cards, MIS, SDLC) to achieve the desired end state</p> <p>Generate artifacts that describe the logical organization of enterprise functions, business capabilities, business processes, people organization, and information resources (AI taxonomy, Ontology, Meta-models).</p> <p>Detailed migration / implementation/ governance models based on TOGAF, and Zachman and AI specific industry standard frameworks, ISO, NIST protocols</p>
2	AI Business Architecture	<p>Articulate the functional structure of an enterprise in terms of its business services and business information that will be basis for AI based Agents, IoT landscape, Big data flows, M2M and M2H interactions using AI entities like Chatbots.</p> <p>Enumerate, analyze, catalog, and suggest improvements to the strategic, core and support processes of the business unit, as needed, to support strategic and operational goals.</p> <p>Generate business models (Value stream, Motivation, Stakeholders, End users, Org. maps, Capabilities) and to serve as a business foundation of the enterprise to enhance accountability and improve decision-making for an AI based platform.</p> <p>Define the data elements shared between this business unit and other units in the enterprise and the relationships between processes, people, systems,.(Inter-Department, Social, Mobility, Guests, Corporate needs, End user needs)</p> <p>Mapping identified gaps between the current architectural state and target AI model state that affect underlying services, AI entities, IoT hubs, Micro services, processes, people, and tools.</p>
3	AI Information / Website data / Bigdata Architecture	<p>Plan information architecture by studying the site concept, strategy, and target audience; envisioning architectural scheme, information structure and features, functionality, and user-interface design for HMI and Agent GUI;</p> <p>Organize information by translating user behavior into media structure and elements; crafting interactive experiences for man-machine interfaces;</p> <p>Create user scenarios; storyboards; preparing data models; designing information structure, work-and dataflow, and navigation for various AI entities, form factors, devices and users ;</p> <p>Model Information based on Big Data Alliances, Open Data Center Info-aas framework, Open Stack, TOGAF frameworks</p>

4	AI Solution Architecture	<p>Leverage the overall enterprise AI vision in designing the projected solution and transforming that vision through execution into the programs / project work packages</p> <p>Provide cross-domain, cross-functional and cross-industry expertise on various technologies to fulfill the solution stack needs</p> <p>Model the hi level conceptual, logical, physical and deployment components as solution bundles(main and alternate); showcase the ROI in each case</p> <p>Design components(AI entities like Bots, IoT hubs, Event propagation, Micro servers, Autonomous activities/ services) that will be used to implement the required capability, KPIs, SLA, functional, non-functional metrics</p>
5	Cloud services (SaaS, PaaS) for AI solutions	<p>Provide onsite customer assessments for AI Cloud Computing framework (PaaS, and SaaS) and deployment models (Private, Public, and Virtual Private), On-demand self-service for AI apps, frameworks and service</p> <p>Design, and implementation of customized technical AI solutions for customers in the Data Center, Desktop, Mobile and in the Cloud</p> <p>Develop solutions for data protection, disaster recovery, and BCP and application requirements.</p> <p>Generate deployment and integration models at various locations (corporate in-house, collocation, managed) for PaaS, SaaS</p>
6	AI Technical Architecture – Project specific	<p>Analyze application and business requirements for technology; gap fit analysis functional and non-functional requirements</p> <p>Define a taxonomy of platform services and logical technology components (including standards); refine the taxonomy; mapping product technical specifications to project; determine configuration of the selected technology</p> <p>Identify relevant applications/ micro servers where technology is to be deployed; define man-machine interfaces, Agent consoles, API for integration, cloud based integration and configuration</p> <p>Provide technical guidance for sizing and costing, capacity planning, installation/governance/migration impacts, performance, maintainability and availability</p>
7	AI Strategy and Transformation	<p>Create strategies and plans that define how information technology should be utilized to support an organization's overall AI strategy.</p> <p>Assist in setting up AI teams on SaaS, PaaS models for AI projects.</p> <p>Design of cloud based AI transformation maps to suite your business models for in source, outsource of your corporate.</p> <p>Assist in finding the best cost management (CapEx, OpEx) of your assets, inventory, manpower, how each role can utilize cloud power to drive automation of IT dept, Devops agile processes to help reduce costs.</p> <p>Strategy and roadmap development to leverage/Reuse existing IT assets, migration</p>

		models, What-If analysis , simulations, Proof of concepts
8	AI Systems Integration and consolidation	<p>Application and process integration across various project modules based on Internet and OSI technology stack, Converged racks , Open stack, Open API models , AI alliances based protocols, IoT protocols, datacenter requirements</p> <p>Leverage on concepts/tools like Microservices, Dell Boomi, BizTalk, Informatica , Azure fabric, IBM Web sphere, Oracle Fusion, to enable integration and transition</p>
9	AI Project Management	<p>Practice setup: AI PMO, Agile AI, Devops, Disaster recovery, BCP, Industry STDs, Compliance, Audit, Governance, Corporate matters</p> <p>Project /Program development, agile management and integrate with AI cloud operations on a 24x7, 365 with 99.99% availability models.</p> <p>Facilitate the definition of project scope, track goals and deliverables; define project tasks and resource requirements; manage project budget;</p> <p>Train your staff in knowledge transfer of the new roles, jobs they manage and transition plans to move to cloud models and operations management.</p> <p>Planning, executing and oversight of projects that may be within company, external vendors premises and other onsite/offshore model of engagement</p> <p>Generate project estimates, schedules, deliverables, critical path, root cause analysis, defect tracking and resolutions.</p>
10	AI Pre sales support	<p>Provide list of partners/ vendors, tools for your Dev team to engage and work on the implementation aspects</p> <p>Help you in identifying low cost off shoring teams, verification of technical background, interviews.</p> <p>International procurement, management of licenses, warehouse for logistics, inventory, auditing and travel management.</p>
11	AI Business Needs (RFI/RFP/RFP assistance)	<p>Design sales packages for all your target clients: home business, SME, large corporations, of all ages: kids to old aged</p> <p>Projecting companies solutions and offerings in response to RFP/ RFI</p>
12	AI Quality Initiatives	<p>Help you to mature across your offerings based on selective alignments to industry models, Standards that best suit your clients, target groups that help you have an edge.</p> <p>Help you in brand building your AI offerings, sales, marketing, international presence, offshore venturing, office setup in free trade zones like SEZ, Dubai free trade zone.</p> <p>Identify courses, training for staff, custom content to suite your tools, domain.</p> <p>Onsite visits, training, Site inspection, meeting, based on the requirements.</p>
		Analysis to retain, migrate, sunset assets, new developments for your business to move to cloud models.

13	AI Business Analysis	<p>Elicit AI requirements(models, landscapes, costs, GUI, IP, Security) using interviews, document analysis, requirements workshops, surveys, site visits, business process descriptions, use cases, scenarios, business analysis, and workflow analysis.</p> <p>Critically evaluate information gathered from multiple sources, reconcile conflicts, decompose high-level information into details, capture them as needed by BABOK in Business Analysis documents</p> <p>Business Impact analysis, Capex , OpEx, ROI, Cash flows, Feature-Benefits models to help business improve the insights, be agile and adopt AI</p>
14	AI Infrastructure Planning – hardware , network, storage , backup (IaaS, PaaS)	<p>Assist in evaluating new AI based technologies from Apple, Google, Microsoft</p> <p>Suggest new IT projects, systems designs for compliance with AI standards and architectural plans for AI migration.</p> <p>Assess and monitor site based infrastructure requirements and plan and design the necessary upgrades or additional infrastructure as required.</p> <p>Develop guidelines and upgrade techniques for new operational procedures for the support of databases, hardware systems, operating systems software, network systems software, security and client server systems</p>
15	AI business portfolio assessment services (workshops)	<p>Workshops to show the investments ROI, Opex, Cap ex, for you to start.</p> <p>Proof of concepts with select partners to show you how your new env. looks and demo you similar models.</p> <p>Work with stakeholders to develop a portfolio management governance process that is well integrated into other IT processes.</p> <p>Provide recommendations related to changes needed in the functional unit, governance model or changing the value chain process to ensure best results</p>

Contact

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