## ML Immersion Day agenda:

Duration: 9 a.m. - 6 p.m.   
Focus of Day is the following:

* Enable team to be familiar with SageMaker Studio, SageMaker components and Services,
* Enable citizen personas [ Citizen Data Scientist, Data Engineers, Analyst] to prepare data, build, train and deploy using Amazon SageMaker Low Code No Code tooling
* Enable Data Scientist to build, train, deploy an end to end model using SageMaker Notebooks

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| **Time** | **Topic** | **Details** | **Comments** |
| 9 - 9.15 | Kick Off | * Introductions, * Agenda, * Flow of the sessions, * Parking Lot * Burner accounts log ins   Support Material: Burner Accounts in Event Engine | For Day 1 sessions / workshops, AWS burner accounts will be used to reduce potential issues with security / controls with C1 accounts |
| 9.15 - 10.15 | SageMaker Overview | SageMaker Deep Dive   * ML Life cycle & SageMaker components * Domain, Users, Applications * How SageMaker is Organized - Experiments, trails, trail components * SageMaker Studio – Walk thro * SageMaker Accelerators | SageMaker is a umbrella services with 15+ services, 4 applications, demystifying containers, custom configurations, MLOps terminologies etc.. this session focused on giving you a good overview and confidence on navigating SageMaker Studio and its services |
| 10.15 - 11.00 | SageMaker Studio hands on | Getting hand on with   * SageMaker Studio * Data Wrangler * SageMaker Resources * SageMaker Accelerators | Click Along session on SageMaker - Setting up DW, Projects, deploying Jumpstarts, Auto Pilot experiment.... |
| 11.00 – 11.15 | Break | * Use Case read out | Working Break with reading out the use case for the lab |
| 11.15 – 12.15 | Data Wrangler | Data Wrangler for preparing Data for the Use Case   * Data Ingestion * Exploratory data Analysis / Insights * Transformations – Built in / Custom * DW container * Destinations   + Feature Store / S3   + PySpark   + SageMaker Pipeline | Loading, Data analysis, feature engineering, push to feature store, convert it in to a pipeline using Data Wrangler |
| 12.15 – 1.00 | Lunch |  |  |
| 1.00- 2.30 | Model Training – Low Code / No Code | Model Training for the Use Case using SageMaker Low Code / No Code tooling   * SageMaker Canvas * SageMaker Auto Pilot * Model Registry | Develop, Train, Evaluate the model using SageMaker Canvas – No Code tool for Machine Learning for Business Analyst  Develop, train and evaluate the model using SageMaker Auto pilot – Low Code tool for ML for Citizen Data Scientist  Review models developed by Canvas and AutoPilot in SageMaker Experiments, Trails and Trail components. Selecting the best model for deployment |
| 2.30 – 2.45 | Break |  |  |
| 2.45 - 4.00 | Model Training | Model Training and Deployment using SageMaker Notebooks   * Model Training using SageMaker Inbuilt Algorithm * Model Deployment using SageMaker Model deployment * Model Inference using SageMaker Notebooks |  |
| 4.00 – 4.15 | Break |  |  |
| 4.15 – 5.30 |  | Advanced SageMaker Topics   * Data Bias * Model Monitoring |  |
| 5.30 – 6.00 | Wrap up | Getting Started on next steps  Additional resources |  |