# Sungwook Yoon

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## EDUCATION

## PURDUE UNIVERSITY

Ph.D in Computer Engineering

Machine Learning | Planning Classic Artificial Intelligence

### SEOUL NATIONAL UNIVERSITY

BSEE IN ELECTRICAL ENGINEERING Control

Instrumentation

## LINKS

LinkedIn:// **sungwookyoon** 

# PROJECTS

## DATA MIGRATION

On Prem SQL to Hadoop On Prem Hadoop to AWS AWS to Databricks

### ETL

Data Ingestion and Operationalization on Hadoop

Data Ingestion and Operationalization on AWS

Data Ingestion and Operationalization on Databricks

Implemented Alert and Data Quality Checks via Cloudwatch and Montecarlo

# SKILLS

## PROGRAMMING

Language Scala • SQL • Python Shell Script • Java • C Spark Pyspark • Spark-streaming • Kafka AWS Lambda • EMR • EC2 • ECR • Redshift Step • Cloudwatch • Appsync Platform Terraform • Boto3 Databricks

Unity Catalog • Workflow • Ray

## EXPERIENCE

#### COMCAST | PRINCIPAL ENGINEER

2016 – Current | Philadelphia, PA

- Deep experience in Advertisement data
- Along with Data Operation, I provide RCA on Data issues
- Implemented data ingestion and ETL operation on various platforms (AWS, Hadoop and Databricks)
- Built fault tolerant ETL operations on AWS, mostly via Spark scala or Pyspark jobs on EMR
- Built data monitoring and data quality operations on various platforms (AWS, Hadoop and Databricks)
- Migrated data operations from OnPrem to Hadoop
- Migrated data operations from Hadoop to AWS
- Migrated data operations from AWS to Databricks
- Scaled data operations to 100Billion+ size
- Data consumption from Kafka via Spark Streaming
- Data consumption from Kinesis via Firehose on AWS
- Worked with Kafka Schema Registry
- Built fault tolerant scalable data solutions to handle data faults and system faults.
- Operationalize Machine Learning codes into AWS via Step, EMR and Lambda
- Massive parallelization through Lambda on AWS and Ray on Databricks
- API implementation on APIGateway and Appsync
- Lambda functions via Python and Container

#### MAPR | PRINCIPAL DATA SCIENTIST

2014 – 2018 | San Jose, CA

- Close to 100% Professional Services Deliveries
- Delivered Hadoop System Installation
- Engaged on customer specific projects to help the customer's goals in data operations
- Leveraged various Hadoop echo systems, Hive, Spark, Oozie, HBase and many other Hadoop components
- Presented Hadoop Experiences in various Meetups

## RESEARCH

### PALO ALTO RESEARCH CENTER | RESEARCH STAFF

2008 – 2012 | Palo Alto, CA

- Published Research Papers in various conferences and Journals in Artificial Intelligence
- Worked on various DARPA projects for research deliveries

## AWARDS

- 2021 Influential Paper Award
- 2011 Best Paper Runnerup
- 2009 Best Machine Learning
- 2004 Winner

d ICAPS

Journal of Artificial Intelligence International Learning and Planning Competition International Planning Competition