This was a Band 7 position at IBM.

Led and managed SRAM and Logic yield for 14nm IBM microprocessor products, taking ownership of primary responsibilities.

Diagnosed and resolved over 10 distinct random and systematic defects, resulting in significant yield improvements, reaching enhancements of up to 60%.

Utilized extensive data mining, correlation, and trend analysis techniques to diagnose and extract core identifying features for these defects.

Pioneered the implementation of machine learning and random forest classifiers. This technique was never before used in my team and enabled an automated way to identify and monitor Logic and SRAM defects, saving hundreds of hours and providing a valuable dataset for further analysis.

Analyzed the impacts of device changes on Logic and SRAM yield and metrology parameters, assessing whether increased performance justified potential yield loss.

This is a Band 8 position at IBM.

Led and managed SRAM and Logic yield for 7nm and 5nm IBM microprocessor products, taking ownership of primary responsibilities. Implemented machine learning techniques to classify multiple systematic defects, which resulted in a 20% yield improvement and maintained a baseline of 98% yield. Utilized Random Forest Classifiers and custom-built classifiers to classify defects.

Developed and maintained 7 dashboards using Python and SQL. Automated engineering tasks and introduced innovative data visualization methods through a robust user-interface. Significantly reduced engineering workload by hours, uncovered novel insights, leveraged data science libraries such as Scikit-Learn and Dash.

Engineered a robust big data pipeline using Python and SQL, incorporating an algorithm to analyze 9,000+ unique parameters, with the objective of isolating significant shifts. This automated the timely detection of potentially harmful changes in electrical or device measurements, most of which are not regularly monitored.

Engineered an unsupervised machine learning algorithm to cluster wafers with similar regional defects with the dual purpose of grouping known fails together as well as revealing previously unknown defects.

When I was getting my Masters of Information and Data Science at UC Berkeley, I had the privilege of working alongside Adam Yang, and I got to see first-hand their exceptional skills in data analysis and problem-solving through many of our group projects. His background is in Electrical Engineering and he works as a hardware developer in IBM's semiconductor division. I've seen him immediately apply what we've learned at school to his job at IBM and pioneered many data science techniques to characterize semiconductor defects and solve challenging problems. Through our school work, I know he is experienced with working with large and complex data sets, different supervised and unsupervised machine learning techniques, A/B testing, and Natural Language Processing.

Having collaborated closely with Adam yang, I am confident in recommending you take a closer look at their resume. His technical skills with utilizing and extracting value out of data and communicating results would make him an ideal candidate for a data science position at Meta. I believe that Adam would bring valuable insights and contribute significantly to Meta's objectives.

Thank you for considering my recommendation,

A/B Testing, Amazon Web Services, Arduino, C, Clustering, Communicating Results, Dash, Dashboards, Excel, Feature Extraction, FPGA, Git, Google Cloud Platform, Hadoop MapReduce, JMP, LC-3, Machine Learning, Matlab, Matplotlib, NLP, Numpy, Object Oriented Programming, pandas, PCB Design, PowerPoint, Processing, Pyspark, Python, R, Random Forest Classifier, Scikit-Learn, Seaborn, Spark, SQL, Supervised Learning, tensorflow, Unity 3D, Unsupervised Learning, VHDL