GEORGE J.J.T.A. HAYWARD, Optimist

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Data Scientist - 10 yrs. experience & training. Impact at Meta & Google (SQL/Python/R/ML). Skilled orator. Mom worked as a bus monitor; Dad was disabled. They taught optimism, work ethic, & creativity.

REFERENCES

- "George has excellent communication skills and a unique flair for presenting work in ways that is easily understood. This is evident in the fact that almost everything he touches gets a good deal of traction on Workplace, and builds in to successively impactful engineering projects half over half. He has a special talent for identifying critical priorities for supporting Messenger wide initiatives, and executing on them. He has built up a body of work that garners respect and influence with the Messaging Health community. Most of what he does comes with the foresight of both short term and long term impact, and most of what we do in the Efficiency space would not be possible without collaboration with George and all of the fantastic work he does.

  (1) George created a wiki for data scientists for writing a Python script and running it automatically out of fbcode. It's almost unheard of to have a data scientist create visibility in to what has historically been a laborious engineering exercise. He came up with a clearly defined 19 step process for this that unblocks data scientists across the company and allows them to move faster and do more. His work gained a ton of visibility and has since garnered engineering support to turn those 19 steps in to a single button to automate this whole process. This is next level, company wide impact that wouldn't have been accomplished without George's foresight and initiative. This should pay dividends for years to come, and shows a tremendous amount of influence getting further buy-in from the engineering community

  (2) George has continued to drive battery efficiency and has expanded the multi-half effort from Android to iOS. Thanks to his guidance and previous work on Android we achieved parity this half between Android and iOS by introducing foreground/background %DRAIN for MiOS. We also have a roadmap for building out the battery beloved model on MiOS that mirrors what he previously established in M4A. This is a long term effort that George is driving to more quickly identify and mitigate regressions in MiOS. It's also something unique to Messaging Health that has begun to get interest by other PRE teams across the company. It's largely been thought that battery was a dead end for fixing regressions, but George has come up with a sophisticated and unique way to make it an all-encompassing metric for looking at the health of an application as a whole. It's quite clever, and we're excited to build this out in more in 2022.

  (3) George has continued the trend of successful research to impact the increasingly important disk efficiency space. His Council of Disk work identified low disk space thresholds that we've used to build the FBDiskUtility library, as well as inform product decisions around disk intensive features like Armadillo and Community Messaging. His work on %BAD has begun to build out a first ever user-centric way to view disk efficiency, and it has laid the foundation for 2022 work on %GOOD and a user survey to refine and optimize how we look at user-centric disk efficiency.

  To summarize, George has made short term and long term investments that impact Messaging now, and set direction to maintain a high degree of quality in the future. The work streams he drives and his influence on the organization directly impact the day to day work we do in Efficiency, and the North Star we're aiming for. He truly is a pleasure to work with and have on the team!"

  — Chris Czupak (Software Engineer)

- "George's persistent influence started yielding results is bringing iOS battery efficiency metrics to parity with Android. His proactive leadership and guidance helped the new engineer to start delivering the implementations that support building the metrics.

   The battery work in Android Messenger helps to identify efficiency issues in MSYS, the knowledge we built over the period of time helped to identify and optimize gCPU regressions in FB4A due to excessive snapshots. This is something we learned earlier as FB4A and M4A shares same battery infra. Earlier, similar analysis helped IG4A as well. The knowledge and insight we gain using Android Battery efficiency overall helps across products in optimizing messaging platforms and George's work in moving forward with this is key for long term success.

   We started leveraging battery infra to understand device battery drain caused by Android Messenger to a metric that helps understand how efficiently Android Messenger consumes various system resources. This so far helped us to ship very complex projects without them causing wastages with consumption.

   We are now pivoting towards using efficiency to understand how consumption impacts performance and user experience.

   This is a big challenge and we are hoping to create new insight about how user experience Android Messenger. George is a significant contributor in continuously contributing, innovating and ideating. The work we are planning to do next will add a new dimension in shipping amazing products. His continuous leadership on this domain is the difference between success and failure."

   — Arnald Samthambi (Software Engineer)

- "George is a strong DS partner who functions as my "go-to XFN" when I need support on important cross-company initiatives. George has been instrumental in defining and delivering our disk footprint and storage management project. …George researched, defined and created thresholds for low-storage available and critical-storage available for user devices. George drilled down from an ambiguous problem "How do we know when storage is low?", assessed the user problems inherent in a low or critical storage environment, and provided specific thresholds that the engineering team converted into APIs that other teams can use to implement low-space and critical-space warnings. George socialized his ideas with partner teams like MiB and Lite, and got feedback from XFN that helped inform our plans. I was continually impressed with George's attention to detail and proactiveness in driving forward our plans. Without George we would not have our thresholds so precisely and effectively defined and the project would not have been nearly as successful.

   He exhibits strong leadership skills and ability to generate consensus around complex ideas. For example, George got his ideas adopted by other surface teams like MiB and Lite, and led meetings with PMs and XFN from these teams. George is very proactive in solving problems and getting his solutions to completion; rarely do I need to follow-up with him or provide specific guidance. Rather, George operates independently and autonomously to create impact for Meta and share his expertise with other teams."

   — Brendan Brooks (Product Manager)

- "George demonstrated considerable impact with the development and submission of the PRE survey, which is key for Messenger's H1-22 priorities as it provides directly answers to questions or reliability and performance. While existing data is being collected on reliability, granular survey data to answer questions such as "When do you think a normal person will notice if performance and reliability is good?" don't currently exist anywhere. Even before this announcement, George saw the need for direct user surveys, so we can hear from our customers directly, and he created his own deep-dive performance, reliability, and efficiency survey. As this is the second iteration of the PRE survey (the first only asked about battery drain), this shows George consistently identifies missing areas and actions against them directly with little direction from leadership and significantly increases the scope of the work. To do this, George assembled a host of managers, data scientists, and engineers to align on the wording and topics of the survey. In terms of technical skill and execution, he scoped out the questions in Simon, designed the flow, conducted the power analysis, ran the SQL queries to pick target locales, wrote out the business reasons for the survey, met with me numerous times, submitted all logistical paperwork, and ultimately was able to get the survey an initial approval.

  The survey review process at Meta can be challenging to get though. Since each survey is considered a product, visible to users, survey reviewers require submitted surveys to be launch ready. Each survey is then reviewed on its merits by an assigned reviewer before gaining an initial approval, and not all surveys are approved. To do this, George had to draft the survey, verify the survey language with stakeholders (data scientists), program the survey in Simon, design a control flow, conduct an accurate power analysis, state a business case, design a control flow, program a Tessa config to launch the survey to users, translate the survey, and send the entire project to survey review. As such, the initial approval demonstrates a proof of concept for this survey which can be roadmapped by other teams. Furthermore, the PRE survey needed additional review by PXFN partners (who were likely out during the holidays) because of the anticipated reach. Connecting survey data to pipelines, user data, and predictive algorithms requires additional approval."

  — Bryan Wilcox (Research Scientist)

- "George is a fantastic mentor for data scientist and ambassador for all thing diversity from a business perspective. He most certainly puts the company priority first and has the ability to influence great candidate experiences and hiring successes. He thinks outside of the box to help recruiters and candidates calibrate to the Data Science world here at Meta. A thought leader driving amazing org impact through his time commitments."

  — Ledonia Davis (Technical Sourcer)