# Konrad M. L. Claesson

## CEO AND *SENIOR SOFTWARE ENGINEER*

*At present*, I am working on talktopapers.com, *a service that leverages state-of-the-art AI models to help researchers zero in on relevant papers in minutes instead of days.*

## Singularity Group – 2020-2023

**UNITY DEVELOPER**

- Architected, implemented and tested game-wide features and APIs for Mobile Minigames, a mobile game driving $9,000,000 in sales, reaching over 2.6 million players, and becoming the #1 grossing game in the Philippines GooglePlay Store and Apple AppStore.

- Architected, implemented and tested a web view and media player for Unity (C#) using native Android (Java), iOS (Swift) and DOM (JavaScript, HTML, CSS) APIs.

- Coordinated company-wide web view API roll-out and collaborated with over 15 Unity developers, 5 backend engineers and 10 QA testers to build custom-tailored web view integrations for over 15 features in Mobile Minigames.

- Implemented a C# API for querying scraped YouTube, Twitch and Facebook content from GraphQL. The API ended up seeing game-wide adoption and was foundational to core features such as Hot Stories: an in-game Reddit and Twitter client; and Community Browse: an in-game client for browsing videos from YouTube, Twitch and Facebook.

- Implemented a YouTube-like system for displaying and playing video guides in well over 100 in-game locations. This was accomplished through extensive client-server communication and use of the previously mentioned YouTube scraper API.

- Used Reddit, Twitter and internal APIs to implement support for image, GIF and video posts in the game's Reddit and Twitter clients. C#, JavaScript, HTML and CSS were used for this project.

- Implemented numerous other features such as an in-game browser, unfurled hyperlinks, social media follow buttons, and internal testing tools.

- Contributed to numerous other in-game features such as a forum, live streaming, chatting, automatic replays of noteworthy moments and SoundCloud podcast integration.

**AWS ENGINEER**

- Architected, implemented, tested, deployed, and maintained a distributed data pipeline and notification service that pulls and processes *Mobile Minigames* game data from Redshift, Athena, DynamoDB, CloudWatch, MongoDB, and the GooglePlay Console, to emit alerts to Jira and Slack upon detection of anomalies of concern. AWS CDK, AWS SDK, dbt, Go, Rust, Python, and C# were used in this project.

- Co-developed a schema of close to 300 interdependent Athena tables used for analytics. Used Go with the AWS CDK and SDK to implement a data pipeline for routinely updating these tables and refreshing dependent AWS QuickSight analyses.

- Coordinated a migration, from Athena to Redshift, of the aforementioned alert service, as well as close to 500 Athena tables, views and queries used for analytics. The migration was completed in less than a month, with close to no interruption of service, and while never bottlenecking the Redshift transition.

**DATA ANALYST**

- Compiled and analyzed revenue and retention analytics, using SQL, Python, dbt and AWS QuickSight, leading to identification of bugs and design flaws that, when fixed, yielded statistically significant revenue increases of up to 10%.

- Planned, lead and executed over a hundred data-driven investigations of questions informing key game design and marketing decisions.

# Education

## FORMAL EDUCATION

- Computer Science at the Royal Institute of Technology, Stockholm (2018-2020)

- Finished the natural science program at Viktor Rydbyerg's Gymnasium in Odenplan — one of Sweden's most prestigious high school — with near straight A's. (2015-2018)

- Finished upper secondary school with near straight A's at Vittra Brotorp. (2012-2015)

## NOTABLE PROGRAMMING SKILLS

Only languages, services, tools, libraries, frameworks, and skills that I have used in an extensive professional capacity are listed below.

*Languages*: Go | Python | SQL | NOSQL | C# | Java | JavaScript | TypeScript | HTML | CSS | Rust
*Libraries & Frameworks***:** AWS SDK | AWS CDK | Entitas ECS | .NET
Tools: Unity | Docker | Oxygen WordPress Builder | Git

*Web Development:* React | Node | Express | NextJS | TailwindCSS | Bootstrap | WordPress
*AWS Cloud Computing:* Lambda | Fargate | EC2 | ECS | Step Functions
*AWS Other:* CloudFormation | CloudWatch | IAM | SNS | SQS | Secrets Manager | Route53

*Data Science:* pandas | polars | numpy | matplotlib | seaborn | plotly | scipy | dbt
*Databases:* AWS Redshift | AWS Athena | DynamoDB | MongoDB | PostgreSQL | MySQL | Redis
*AWS Data & Analytics:* S3 | Redshift | Athena | DynamoDB | Glue | SageMaker | QuickSight

APIs: OpenAI, Anthropic, Twitter, YouTube, Twitch, Reddit, Yahoo Finance
*Testing:* NUnit | JUnit | Jest | Mocha | Specflow | TDD | BDD | unittest | AirTest
*Roles:* Data Analyst | AWS Engineer | Full-Stack Engineer | Web Developer | Unity Developer

*Other Keywords:* AWS | Cloud Computing | Microservices | Distributed Systems | Analytics | CI/CD | GitLab | GitHub | Jupyter | OOP | Game Development | ECS | Unity 2D | Automation | English | Swedish | Lithuanian