

# Hoyeol Kim

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Lead ML Data Linguist at AWS | iOS Developer

## Experience

### Amazon Web Services – AI Data, Lead Machine Learning Data Linguist | Texas, USA

Jul 2022 - Present

- I evaluate transcriptions and improve annotation, segmentation, tools for data QA, and guidelines for data/QA vendors.
- I write scripts to analyze and manage ML data, in addition to computing metrics, and write code for a weekly/monthly report tool.
- I work on data QA and model evaluation for the automatic generation of clinical notes (HealthScribe) and for toxicity detection.
- I work on the data evaluation for RLHF, Responsible AI, and RAG for Amazon Titan (LLM).

### Deepgram, Multilingual NLP Analyst | Contract | San Francisco, California, USA

Apr 2022 - Jul 2022

- I evaluated and improved the performance and outputs of end-to-end deep learning ASR models.
- I evaluated multilingual data for variance in labeling, proposed better approaches for multilingual model architecture, and improved text cleaning pipelines.

### Texas A&M University, Graduate Instructor | College Station, Texas, USA

Aug 2017 - May 2022

- I taught a course per semester, such as “Topics in Digital Research” ([elibooklover.github.io/ENGL304-Spring2021](https://github.com/elibooklover/ENGL304-Spring2021))

### Gindo Solution, Project Manager & iOS Developer | Part-time | Arlington, Virginia, USA

Nov 2017 - Oct 2018

- I managed projects and guided UI/UX designs and functional developments for both Android and iOS apps.
- I developed several functions, such as notification with badges, point systems, and payment functions, using UIKit and Firebase.

### Tulango Marketing Lead | Seoul, South Korea

May 2016 - Nov 2017

- I worked on language data for automatic tests, localized the app languages in English, Spanish, and Korean.
- I managed both online and offline app ads. Through online advertising, I gathered around 2,000 users in two weeks.

## Education

### Texas A&M University, PhD in English with Computational Literary Studies | College Station, Texas, USA | Supervised by Maura Ives, Amy Earhart, Shawna Ross, and Ruihong Huang (CS)

Aug 2017 - May 2022

- Dissertation: “Computational Approaches in the Humanities: from Sentiment Analysis to Deep Learning Colorization.”
- Sentiment Analysis - Syuzhet and its Lexicons: [digitalhumanities.org/dhq/vol16/2/000612/000612.html](https://digitalhumanities.org/dhq/vol16/2/000612/000612.html)
- EDA of Victorian400 Dataset with cGANs: [eupublishing.com/doi/abs/10.3366/ijhac.2021.0269?journalCode=ijhac](https://eupublishing.com/doi/abs/10.3366/ijhac.2021.0269?journalCode=ijhac)

### Colorado State University Global, Certificate in Computer Programming | Aurora, Colorado, USA

Aug 2023 - Apr 2024

- My overall GPA is 4.0. I took the following courses: Programming I, II, and III (Java & C++), Data Structures and Algorithms, Software Engineering, and Platform-Based Development (Kotlin).

### University of Exeter, MA in English Literary Studies | Exeter, UK

Sep 2013 - Nov 2014

### Hankuk University of Foreign Studies, BA in English Literature & Linguistics | Seoul, South Korea

Feb 2013

## Skills

### Programming

I use Python with pandas for data management and analysis, as well as Swift for iOS development on a daily basis. During my PhD research, I utilized Python, R and SAS.

### Software

I am familiar with Bash, Unix, and Linux environments, in addition to Git version control.

### Certificates

I hold a SAS Certified Base Programmer for SAS 9 certificate and a Japanese Language Proficiency Test N3 certificate.

## Projects

### SafeKey – Password Manager (iOS)

Jan 2024 - Present

iOS App, Personal Project: [apps.apple.com/us/app/safekey-password-manager/id6475980444](https://apps.apple.com/us/app/safekey-password-manager/id6475980444)

- A secure password manager that supports syncing through iCloud. I developed this app, using SwiftUI, SwiftData, CloudKit, StoreKit, Local Authentication, UserDefaults, and UITextField.

### NeonLED – LED Banner (iOS)

Nov 2023 - Present

iOS App, Personal Project: [apps.apple.com/us/app/neonled-led-banner/id6474363843](https://apps.apple.com/us/app/neonled-led-banner/id6474363843)

- I developed this app in SwiftUI and localized it for languages, such as Korean and Japanese.

### Transliter (Python)

Apr 2023 - Present

Python Library, Personal Project: [pypi.org/project/transliter](https://pypi.org/project/transliter)

- Transliter transliterates multilingual text into Latin script.
- Transliter supports Korean, Japanese, Russian, Ukrainian, Bulgarian, Macedonian, Mongolian, Montenegrin, Serbian, and Tajiki.

### AI Data Monthly/Weekly Business Reports (Python)

Apr 2023 - Present

Python Scripts, AWS AI Data

- All the data are extracted through API calls, processed through pandas, and exported as CSV files.

### Victorian400 (ML Dataset)

Dec 2019

ML Dataset, Research Project: [kaggle.com/datasets/elibooklover/victorian400](https://kaggle.com/datasets/elibooklover/victorian400)

- I created, curated, and shared 400 image files for conditional generative adversarial networks to train with for a colorization project.

### K-Town Rewards (iOS)

Nov 2017 - Oct 2018

iOS App: [appadvice.com/app/k-town-rewards/1374362677](https://appadvice.com/app/k-town-rewards/1374362677)

- I developed the app in UIKit, implementing features like badge notifications, point systems, and payment functions.