

# Pratik Karki

pratikkarki.com | Github | PGP Public Key

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## EDUCATION

- M.Sc. in Computer Science **University of Iowa** Iowa City, IA Aug. 2020 – May 2021
- B.A. in Computer Science **Grinnell College** Grinnell, IA Aug. 2016 – May 2020
- Teaching Assistant - CS Department (CS-207, CS-301, CS-324)

## EXPERIENCE

- Software Engineering Intern **Source Allies (Rescinded: COVID-19)** Des Moines, IA Summer 2020
- Research Assistant **Grinnell College CS Department** Grinnell, IA Jan. 2020 – May 2020
- Developed a Recommender System for E-Commerce Products using **Amazon Datasets**
  - Consolidated Association Rule Learning with **Apriori**, K-means Clustering with **Scikit-Learn**, and Embedded Neural Networks with **Keras** for a robust analysis on both the implicit and explicit data of the Amazon Products
  - Utilized **Spark** for ALS Matrix Factorization and NLTK/VADER for **Sentiment Analysis** of Reviews and Metadata
- Software Engineering Intern **CareDash** Cambridge, MA Summer 2019
- Resolved **Elasticsearch** `max_result_window` issue which reduced Crawler-induced 500 error pages by 15%
  - Enhanced **JQuery** based front-end with **A/B Testing** and a filter for providers specializing in LGBTQ+ individuals
  - Developed comprehensive testing infrastructure using **Mocha** and **Selenium** (unit, integration, acceptance tests)
- Android Developer & Team Leader **Grinnell AppDev** Grinnell, IA Jan. 2017 – Dec. 2019
- Designed, developed, and maintained 5 Android applications for Grinnell College Community using **Android SDK**
  - Led **Grinnell Events** team with regular Trello-based workflow and introduced unit testing with Mojito

## PROJECTS MORE ON GITHUB!

- YoutubeNLP (Summer of Shipping) Jun. 2020 – Present
- Youtube Analytics Dashboard to assess Micro and Macro trends
- Build a structured and dynamic back-end with **Flask**
- Tattooder (Summer of Shipping) Jun. 2020 – Present
- React-Native app which matches customers with Tattoo Artists
- Design a robust, user-friendly mobile app using **Expo**
- Nastya Chatbot Feb. 2020 – May 2020
- Chatbot that uses **Facebook Messenger** data hosted on **Heroku**
- Implemented TF-IDF algorithm using Elasticsearch and Bulk API
  - Hosted on Heroku with a Bonsai add-on using Flask back-end
- Feed Me Aug. 2018 – Dec. 2018
- Personalized Android recipe app utilizing **Food2Fork API**
- Created an option to persistently save recipes in Favorites page
  - Selected as Best Team Project at AIT Budapest (Study Abroad)!
- Local Foods Connection Jan. 2018 – May 2018
- Ruby on Rails app for finding **sustainable food options** in rural Iowa
- Engineered admin page to edit registered farms in the database
  - Serves over 4,000 users in the Grinnell College community

## SKILLS & INTERESTS

### Languages

Java, Python, Ruby, Javascript, CSS3,  $\LaTeX$ , C, Go, Kotlin, MySQL

### Techologies

React-Native, JQuery, Node.js, Flask, Tensorflow, Spark, Rails, Elasticsearch

### Interests

Guitar, Animal Fostering, Hiking, Spanish

## RECOGNITION

- Dean's List 4x (Grinnell College)
- ACM Richard Tapia Celebration of Diversity in Computing Scholar (2019)
- Noyce/Intel Internship Grant (2018)
- CLS Conference Grant - DotGo Paris (2020)
- Global Learning Program** Fellow (2017)  
Travel-Embedded Study of Immigration in the XXI Century in the USA, Mexico, Spain, Greece, and Germany