

PRATIK KARKI

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»»» Education

Expected – May 2020

Grinnell College – B.A. in Computer Science & Statistics

» **Honors** Grinnell College Dean's List (Fall 2016, Spring 2019) · Noyce/Intel Grant Recipient

Expected – May 2021

University of Iowa – Masters of Computer Science (MCS)

»»» Relevant Coursework & Technical Skills

» **Programming** Java · C · Python · \LaTeX · React · Git · Ruby · Javascript · MySQL · R · Stata · Kotlin · Scheme · Go

» **Technologies** Tensorflow · Keras · PyTorch · Rails · SciKit-Learn · Elasticsearch · XCode · Bash · Node.js · AWS

» **Selected Courses** Software Development · Data Structures & Algorithms · Web Mining · Computer Architecture

»»» Work Experience

May 2019 – Aug. 2019

CareDash – Software Engineering Intern

Cambridge, MA

Technologies used – Ruby on Rails · Javascript · HTML+CSS · Elasticsearch · AWS · A/B Testing · Mocha · Sentry

- » Developed comprehensive testing infrastructure using Mocha (unit, integration, and acceptance tests).
- » Identified multiple crucial logic flaws and resolved them with senior SWE team members.
- » Researched system design patterns and refactored codebase to avoid multiple compiling bottlenecks.
- » Iteratively engineered multiple prototypes of UX components and incorporated feedback from weekly demos.

Jan. 2017 – Dec. 2019

Grinnell AppDev – Senior Android Developer

Grinnell, IA

AppDev is a team of developers who maintain 7 mobile apps with over 1,000 daily community users · \$150k in funding.

- » Spearheaded initiative to create an **Events** app for the college and led a team of 5 android developers.
- » Incorporated dependency injection and unit testing with Dagger and Mojito respectively.
- » Taught weekly classes in intermediate level Android Development to 20+ student developers.

Jan. 2018 – May 2018

Local Foods Connection – Software Engineer

Grinnell, IA

Technologies used – Ruby on Rails · Javascript · Active Record Query Interface · HTML+CSS

- » Engineered a web application to help 4,000+ residents of Grinnell, Iowa find sustainable food options.
- » Created a search function to find recipes and an admin login function using MVC Architecture in Rails framework.
- » Acted as a liaison between project team and client to translate client needs into achievable goals.

Grinnell College – CS Teaching Assistant

Grinnell, IA

Worked hand-in-hand with the instructor to go over course-level planning and hosted weekly review sessions.

- » Team Software Development & Design (CSC-324) – Jan. 2020 - Present
- » Analysis of Algorithms (CSC-301) – Aug. 2019 - Dec. 2019
- » Object Oriented Programming & Algorithms (CSC-207) – Jan. 2019 - May. 2019

»»» Research

Jan. 2020 – Present

Top-N E-Commerce Recommender System

- » Develop a hybrid recommendation system to best predict e-commerce products for Amazon users.
- » Utilize PySpark for ALS Matrix Factorization and NLTK for Sentiment Analysis of Product Reviews and Metadata.
- » Integrate implicit/explicit data and employ top-k ranking metrics for a model that avoids the long-tail problem.

»»» Projects (on Github)

- » **Ansemic Writing w Tensorflow** Trained a deep learning model to create generative Ansemic writing.
- » **Feed Me** Personalized recipe app utilizing an external API – *Best team project at AIT-Budapest (Fall 2018).*
- » **GrinCompression** File compression program using Huffman trees for a lossless compression algorithm.
- » **Mine Sweeper** Android game with multiple difficulty levels and graphics utilizing the observer design pattern.