# Safal Dumre SafalDumre2022@u.northwestern.edu | 859-693-4987 | US Citizen 1113 Jouett creek dr, Lexington, Kentucky 40509

#### **EDUCATION**

Northwestern University
Cumulative GPA: 3.79/4.00

Masters in Computer Science and Machine Learning
Bachelor of Science in Industrial Engineering
Kellogg School of Management Certificate Program in Managerial Analytics
Relevant Courses: Machine Learning, Data Structures, Project Management, Corporate Finance,
Human Computer Interaction, Design and Communication, Economics

Honors: Quest Bridge National College Match Scholar (6% acceptance rate)

#### **EXPERIENCE**

## Product Management Intern | Instra.AI - Chicago IL

August 2020- Present

- Functioned as bridge between business development, engineering, and client needs to set project deadlines and meeting agendas
- Improved computer vision machine learning algorithm accuracy by 9% to better identify medical instruments in operating room

## Machine Learning (ML) Research Assistant | Northwestern - Evanston IL

June - September 2020

- Restructured MICE algorithm to facilitate live data imputation for small quantities of streamed data in Kafka and Pulsar; improved machine-learning capabilities through efficient use of all available data (Python)
- Structured ML coursework to include new data imputation model to teach students improved data management skills

#### Founder | Launch Innovation - The Garage, Northwestern University

April 2019 - Present

- Performed market research and competitive landscape analysis to create a MVP and pitch a business proposal, SnackShop
- Launched first phase of SnackShop and sold an average of 30 units per week, profiting over 300\$ in the first month
- Awarded \$500 capital to launch app development; intended to facilitate customer orders

# Business Development Intern | Finca Tablazo - Desamparados, Costa Rica

June - August 2019

- Increased profit revenues 200% by developing and implementing phased expansion of seed products into super retailers
- Initiated a rebranding based on industry trends of seed packaging to decrease cost and increase customer appeal
- Communicated with local government resulting in establishment of legal authorization for marketing of foreign seeds

# Product Development and Prototype Engineering | Shirley Ryan Ability Lab - Chicago, IL

January - June 2019

- Designed and produced a working prototype enabling clients with dysphagia to drink safe metered volumes of liquid
- Conducted client interviews and background research, while maintaining a purchasing record and client communication portfolio
- Managed a project to design and create a professional photography studio, including a strategic marketing initiative
- Evaluated product alternatives using cash flow analysis to optimize studio lifetime

#### **PROJECTS**

## Innovator | WhiteSpace: Dissuo - Northwestern University

January 2020 - Present

- Prototyped Dissuo, a medical device allowing users to self-remove stitches, eliminating need for return doctor visits
- Researched market demand and interviewed 25+ healthcare professionals to improve the design and functionality
- Collaborated with PhD students and faculty to patent the device and prepare for national showcase

#### Student Corporate Consultant | Deloitte Delivers - Chicago, IL

February 2020 - August 2020

- Developed a digital scorecard to evaluate quality of corporate partnerships through statistical analysis of company data
- Analyzed Spark's current corporate partnerships and generated recommendations based on industry research and best practices

#### **LEADERSHIP EXPERIENCE**

#### Technical Project Manager | Institute of Electrical and Electronic - Northwestern University

June- September 2020

- Lead a team to develop a machine learning algorithm to recommend fabrics for designers using AWS lambda and APIs
- Organize pair coding sessions, weekly meeting updates, and code reviews. Wrote product specifications and project goals

## Project Lead | Lend Microfinance - Northwestern University

September 2018 – December 2019

- Directed and managed loan packages to jumpstart growth for new daycare business; increased total revenue by 80%
- Consulted with small business client to implement more optimal strategies, decreasing costs and improving marketing efficiency

# Kentucky Representative | National Youth Science Camp - Kentucky

June 2018 - Present

- Selected as 1 of 2 representatives (0.2% acceptance rate) to create new initiatives to promote student interest in STEM fields
- Launched program in 20+ counties increasing student enrollment in STEM courses by over 23%

#### **ADDITIONAL**

Computer: Python, Tableau, SQL, MATLAB, C++, R, AMPL, Excel, Word, PowerPoint, HTML,@RISK, Simio

Languages: Advanced Spanish | Fluent Nepali

Interests: Hiking, Camping, Cooking/Eating Nepali Dishes, Ultimate Frisbee