

Prajna Kandarpa

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ABOUT

Mechatronics (Robotics) Engineer with expertise in big data, machine learning and full stack web development. I want to show the effectiveness of data science in improving process efficiency and catching engineering failures to non-technical audiences

EDUCATION

UNIV. OF WATERLOO

BACHELOR OF APPLIED SCIENCE IN
MECHATRONICS ENGINEERING

May 2016 | Waterloo, Canada

Cum. Avg: 71.28

Internships: 7 | Experience: 3 years

SKILLS

LANGUAGES

Extensive:

JavaScript • R • Python • HTML/CSS
MATLAB • Bash

Comfortable:

Go • Spark • Hadoop • C • Objective-C
Java • Typescript

TECHNOLOGIES

Extensive:

Node.js • AngularJS • Git • Unix
Emacs • docker • Amazon Web Services
LaTeX • PostgreSQL • MySQL

Comfortable:

Django • Flask • XCode • DevOps

LINKS

GitHub: [prajnak](#)

Website: [prajis.me](#)

Blog: [prajis.me/blog](#)

COURSEWORK

UNDERGRADUATE

(MTE 262) Microprocessors and Digital

(MTE 241) Computer Structures and

Real-time systems

(MTE 320) Actuators & Power Electronics

(MTE 360) Automatic Control Systems

(SYDE 575) Image Processing

(SYDE 372) Pattern Recognition

(SYDE 522) Machine Intelligence

(SYDE 552) Computational Neuroscience

EXPERIENCE

FULL STACK ENGINEER | DATA SCIENCE @ ACERTA SYSTEMS

ANALYTICS

July 2015 - Dec '15, Jun '16 - Dec '16 | Waterloo, Canada

- Designed and built web apps, backend services, machine learning models and data processing pipelines during a 14 month stint as **Employee #1**
- Worked in **Javascript, Python (scikit-learn), R(stats, dplyr), Go(fasthttp)**
- Trained new employees in R and Python for data modelling and visualization
- Forward facing role included interactions with Fiat Chrysler engineers to scope out and deliver solutions for their data analytics

RESEARCH ASSOCIATE | DATA SCIENCE @ UNIV. OF WATERLOO

June 2016 - Dec 2016 | Waterloo, Canada

- Developed techniques for unsupervised and supervised anomaly detection in time series big data collected from automotive and aeronautical systems
- Mainly used **R, Python, Apache Spark and LaTeX**

FULL STACK ENGINEER | VIDEO STREAMING | OS X @ UBIQ, INC.

March 2015 - June 2015 | Waterloo, Canada

- Built an OS X application for streaming wirelessly to enterprise meeting rooms
- Improved streaming latency by **80%** and worked in Objective-C, C, Cocoa and Xcode
- Provided **customer support as well as on site product installations**

DIAGNOSTICS ENGINEER | HARDWARE TESTING @ ARISTA NETWORKS

May 2014 - December 2014 | Santa Clara, California

- Created software based hardware test automation of a new gigabit ethernet switch
- Collaborated with Hardware, Software and Bootloader teams to ensure project delivery

SOFTWARE DEVELOPER - R&D | AGILE | SCRUM @ TRAPEZE GROUP

Sep 2013 - Dec 2013 | Mississauga, Canada

- Built a dashboard to provide project managers insight into their code repository statistics for tracking usage and feature creep
- Used Java Servlets, Grails (MVC framework) and Javascript

PROJECTS

TALON SEP 2015 - MARCH 2016 | TALONCO.GITHUB.IO

- Final year team design project where we built an add-on kit for delivery trucks that enables drone deliveries without massive capital requirements
- Responsible for Radio communications, flight controller tuning and web services

CROP YIELD PREDICTION FEB 2016 - MARCH 2016 | PROJECT REPO

- Used Neural Network architectures to predict crop yields in India from a dataset containing meteorological and geographical features
- Data was cleaned, modelled and visualized using **R(dplyr, caret, ggplot2), LaTeX**