# Prajna Kandarpa

I have more than 3 years of experience in the fields of software development, hardware development and web development. I have previously designed and developed Minimum Viable Products (MVPs) during my stints at startups with minimal supervision and tons of collaboration with teammates. I am able to bring ideas for products to fruition after careful determination of a client's needs. Very fast learner with an intuitive grasp of architectural patterns utilized in modern IT systems design

# EDUCATION

2010 – '16 University of Waterloo, Canada Bachelor of Applied Science in Mechatronics Engineering

This program consists of 8 study terms and 6 internships, each being 4 months in length

#### WORK EXPERIENCE

 $\operatorname{Jun}$ '16 -  $\operatorname{Jan}$ '17 — Research Associate, Real-time Embedded Systems Lab

### University of Waterloo, Canada

Made responsive data visuals for the web to pinpoint defects in automotive and aeronautical systems. Investigated and created machine learning models using techniques including auto-encoders, neural nets, Markov Models and ensembles of networks for prognostics and failure detection.

Jul '15 - Dec '15, Jun '16 - Dec '16 — Full Stack Engineer

# Acerta Analytics, Waterloo, Canada

Investigated and developed techniques for unsupervised and supervised time series anomaly detection in critical risk systems - automotive and aeronautical vehicles. Helped design our data processing infrastructure. Used Amazon Web Services to deploy client-facing products. Designed wireframes and created MVPs after deliberation with customers for their data analytics needs.

# Mar '15 - Jun '15 — Full Stack Engineer Ubiq, Inc., Kitchener, Canada

Developed a low latency desktop streaming module for enterprise meeting rooms in C and integrated it into our OS X application. Implemented communication APIs in Python and Objective C. Worked as part of a four member engineering team that spent long hours working with complex software libraries for multimedia processing.

# May '14 - DEC '14 — Diagnostics Engineer Arista Networks, Santa Clara, USA

Assisted the hardware team, developed software based automation of PCB verification and manufacturing test system verification as part of the Diagnostics team. Used system comm. protocols like SMBus, I2C and JTAG to facilitate comms and automated multi-level tests in the PCB. Added features to manufacturing test automation infrastructure, written using Python Django.

SEP '13 – DEC '13 — Software Developer Trapeze Group, Mississauga, Canada

Jan '13 – Apr '13 — Web Platform Engineer Morgan Stanley Financial Services, Montreal, Canada #203, Lakshmi Residency, Kothasalipeta, Visakhapatnam, India - 530003

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References available upon request

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f https://prajis.me

#### SOFT SKILLS

Communication Excellent spoken, written English. Ex-

perience with technical and business communication prose. Moderate expe-

rience with public speaking

Teams Worked in teams of sizes ranging from 2

- 10. Very easy to get along with and a strong team player that can be trusted upon to deliver project milestones

### TECHNICAL SKILLS

LANGUAGES Javascript, R, Go, Typescript,

Python, Objective-C, C, Java,

MATLAB

TOOLS emacs, git, docker, grunt, LaTEX,

Xcode, PostgreSQL, MySQL

PLATFORMS OS X, Linux, Windows, ArduCopter

FRAMEWORKS Scikit-learn, AngularJS, NodeJS,

D3.js, FFmpeg, SailsJS, Django,

Bootstrap

DESIGN HTML, CSS, Wireframes

#### Projects

#### '16 Talon talonco.github.io

Our 4 person team built an add-on kit for delivery vehicles that enables drone deliveries with integrations for existing warehouse management systems. The kit provides automated package loading and drone takeoff, landing

#### Courses

## '16 Computational Neuroscience

Study the neurobiological systems that make up the brain and central nervous system and design software equivalents.

#### '16 Machine Intelligence

A study of artificial intelligence techniques such as Bayesian frameworks, fuzzy logic, decision trees, neural networks and reinforcement learning

#### '15 Image Processing

A study of human visual system, frequency domain enhancement and image color processing

#### '12 Operating Systems

Intro to memory, resource and process management, interrupt handling, concurrent programming, file systems.