

BRIJENDRA NAG

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Skills

Languages:

JavaScript, C, C++, Node.js,
Java, Python, Racket, SQL, PHP,
Shell, HTML5, CSS3

Tools:

MVC, Backbone.js, React.js,
Unix, Git, HTTP, Android
Studio, Unity 3D, AWS, Heroku,
MongoDB, jQuery, Mongoose

Education

University of Waterloo,

Bachelor of Computer Science
(Sept 2016 – Apr 2021)

Relevant Coursework: Object
Oriented Software
Development, Algorithm
Design and Data Abstraction,
Logic and Computation.

Open Source

 /dropbox/dropbox-sdk-js

Refactored code and
revamped usage examples for
DropBox API's JavaScript SDK.

Volunteering

Everyone Grows
Lucknow, India

Provided **elementary**
education to underprivileged
children, enrolled them into
schools and **raised funds** for
their fees.

Awards

President's Scholarship of
Distinction, University of
Waterloo

Awarded to students with
admission averages of **95% or**
higher.

Experience

Beyond One Eighty

May, 2017 - Present

Software Developer

Creating customised, high performing **geospatial Web applications**
and services for clients utilizing Node.js, Javascript HTML5, CSS3, and
MongoDB, and documenting architecture within.

Waterloo SpaceX Hyperloop: Waterloo

Oct-Dec, 2016

Admin Team

Sponsorship relations management & **Journalism** role. The team
successfully raised CA\$ 43,416 (220% of goal) through a Kickstarter
campaign to fund the prototype hyperloop pod.

Projects

Caffeine

Mar, 2017

- **Won 2nd Place** at **Start Hacks** for designing a product which
prevents drivers from dozing off, hence **reducing accidents**.
- Integrated '**Muse: the brain sensing headband**', with an **Android**
App via Bluetooth.
- Processed **real-time brainwave & accelerometer** data from **Muse**
to track head-position in 3D and monitor brain activity.

Cyphotron

Mar, 2017

- Implemented a **256 bit RSA cryptosystem** from scratch with **Java**
and used the **BigInteger** data type for storing integers **dynamically**.
- Scalable and asymmetric **encryption algorithm** with a public key
to encrypt the message and a secured private key to decrypt it.

Euphorify

Jan, 2017

- Engineered a **web application** for social media at **PennApps XV**
which analyses your Facebook photos and generates a collage.
- Utilized the **Facebook Graph API**, **Microsoft Emotion API** and set
up a **node server** with **AWS** to process sensitive data securely.
- Efficiently sorted the obtained images to **generate a collage**
containing **images of a particular emotion**.

ReactOnFly

Nov, 2016

- **Chrome extension** built at **HackPrinceton** which automatically
'**reacts**' to Facebook posts by detecting face reaction.
- **Integrated** the **Facebook Graph API** and wrote a **Java** script for
continuous deletion of redundant data from the server.

Archify

Nov, 2016

- '**Ready for Emergency**' **Android app** built at **ArchHacks** which
automatically requests help from an appropriate hospital.
- **Designed an algorithm** to choose the appropriate hospital at an
instance. Built the **back-end with Java** and implemented **CSV**
database querying and integration.