BRIJENDRA NAG

www.brijendranag.com ; bnag@uwaterloo.ca
+1-647-554-8308

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: Waterloop   **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.