

## OBJECTIVE

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Seeking a co-op/internship in Bioinformatics or Data Science domain.

## ACADEMIC BACKGROUND

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<b>Master of Science in Bioinformatics</b>	<b>Northeastern University, Boston, MA</b>	Sep 2015 - Present
<b>Coursework:</b> Molecular Biology, Bioinformatics		Expected Graduation: August 2017
Computational Methods 1 & 2, Bioinformatics		
Programming, Data collecting, Storing and		
Retrieving, Statistics in Bioinformatics, Web development(MEAN stack),		
Ethics in Biological Research, Bioinformatics Seminar,		

<b>Bachelor of Science in Dental Surgery</b>	<b>Kurukshetra University, Haryana, India</b>	Nov 2009
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## SKILLS

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Languages/Framework	Perl, Python, R, JavaScript, CSS, HTML, AngularJS, Node.js, jQuery, Bootstrap
Software	Eclipse, Webstrom, AWS, Git, R, CygWin
Systems	Linux, Windows, OS X, Microsoft Office
Databases	SQL, MongoDB, NCBI and EMBL databases using ENTREZ queries, Pfam, Prosite and InterProScan protein databases
Bioinformatics Tools	Multiple sequence alignments using NGS tools like clustalW, MUSCLE, MAFFT, MuMmer, TRINITY, Mauve, Bowtie2, BLAST, FASTA, Samtools

## ACADEMIC PROJECTS

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- **Website builder**

A single page application (SPA) using AngularJS, Node.js and mongodb which facilitates users to build websites by adding heading, body, links, widgets like images and you tube videos.

- **Movies App**

An angular application that queries third party API and display the results where users can search, rate or comment the movies. It also allows users to register themselves as well as follow the other users.

- **Data Science/R**

Worked with Food Inspection Dataset for city of Chicago available to public in CSV format. Using the R programming, the dataset was cleaned and then stored in SQL database where it can be queried for relevant analysis.

- **Statistics/R**

Implemented the probability and statistical concepts like Monte Carlo Simulations, Hypothesis testing, ANOVA, Regression analysis, Statistical Inferences, Bootstrapping, Maximum Likelihood, Clustering and classification methods on ALL, GOLUB and NCI60(ISLR) datasets for Bioinformatics analysis using R.

- **Bioinformatics Computational Methods**

Use of Perl and Python scripts to parse BLAST, GO terms and swissProt files and isolate patterns like hydrophobic motifs, restriction cut sites, CRISPRs etc. for more in depth analysis.

- **Antibodies Targeting Amyloid beta as treatment for Alzheimer's disease/Molecular Biology**

A research proposal/plan including hypotheses, necessary background information, preliminary data, specific aims detailing the experiments, the expected outcomes, caveats and potential future directions

## WORK EXPERIENCE

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### **Precious Dental Care, Fremont, CA 94538**

July 2013 till July 2015

**Job Title:** Dental assistant and Receptionist

- Provide direct patient care in all dental specialties including orthodontics, preventive and pediatric dentistry as dental assistant, responsible for scheduling of patients and recall system.
- Submission of treatment plans for predetermination of benefits, confirm the insurance coverage and breakdown benefits for patients with dental insurance, prepare claim forms and statements, follow-up insurance claims and manage patients financial accounts.

### **Deepak Dental Clinic, Kurukshetra, India**

Dec 2009 till Nov 2010

**Job Title:** Dental Associate

Provide professional dental services to patients, diagnose dental conditions, interpretation of x-rays images and diagnostic tests, deal with routine appointments and check-ups, treatment plans to maintain or restore the oral health of patients, perform treatments such as fillings, extractions and dental hygiene services, community dental education.

## REFERENCES

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1. Dr. Steve Vollmer Director of Bioinformatics	Northeastern University	s.vollmer@neu.edu
2. Vanecia Harrison CO-op Advisor	Northeastern University	v.harrison@northeastern.edu
3. Dr. Vaishali Bhavsar	Precious Dental Care	precious1895@gmail.com
4. Dr. I.K. Pandit Dean	Kurukshetra University	davdental@rediffmail.com