

# CHINTAN GANDHI

*Solving complex problems using a holistic and analytical approach to achieve objectives*

@ [cgandhi@unquo.in](mailto:cgandhi@unquo.in) | [in chintangandhi1987](https://www.linkedin.com/in/chintangandhi1987) | [chints87](https://github.com/chints87)

## CAREER SUMMARY

1. Developed system and performed analysis for operations of a metal foundry
2. Upskilled by completing *Full Stack Web Developer Nanodegree* and developed various applications as part of coursework
3. Completed World Bank course on developing innovative business models for sustainability and social impact - selected to be in top 100 out of 400 applications received globally
4. Conducted market research and developed design specifications using dynamic analysis for a medical assistive device
5. Managed and contributed in the fabrication of products to optimize storage space of implant instruments
6. Introduced project management system and workflows using Basecamp for an upcoming design incubator and monitoring progress of its start-up ventures at different stages for commercial readiness

## SKILLS

*Soft-skills:* Self-Awareness, Empathetic, Team Building, Intercultural Competence, Result-Oriented

*Programming Language:* Python, SQL, JavaScript, MATLAB

*Software / Tools / Frameworks:* Alteryx, Flask, Knockout, Node.js, Apache, SolidWorks, COMSOL, Pro/E, NX, CATIA, Autodesk 3d Max, Microsoft Office Suite

*Operating Systems:* Windows, Linux, UNIX

## EXPERIENCE

### UN-QUO

2020 - Present

*Conceptualized and developed application to enable Indian artisans gain exposure to sustain their craft and livelihood*

- Led client project with partner company to understand their organization's objectives, brainstormed to navigate roadblocks and developed workflows prior to development
- Developed low-fidelity prototype to visualize end-product and workflows
- Designed data structure based on refined prototypes
- Undertook process to create and develop visual design elements
- Wrote code for front-end development to implement visual designs, workflows and for API implementation
- Co-ordinated with partner company's backend team to implement APIs
- Improved code for web-optimization to reduce request calls and data transfer size to empathize with users in rural areas to conserve their data limits

### **Blue Light Industry Foundry, Trinity holdings, Dubai, U.A.E.**

2015 – 2019

*Developed system and performed analysis to optimize existing capacity for foundry operations*

- Created database and an interface system that allows users to view information based on different parameters
- Automated generation of pending orders with a classification model for non-poured items to optimize furnace capacity and reduced cost by 20%
- Segregated production items based on process status which was communicated via e-mail to enhance department planning and productivity that reduced average product idle time by 10% year over year
- Improved customer communication and satisfaction through auto e-mail generated to all sales personnel periodically that provided job status
- Aggregation analysis with classification models to identify bottlenecks and taking necessary actions to increase throughput
- Identified bottleneck process where output, daily average, change in averages recorded provided insights to increase throughput to meet targets
- Created an interface module that evaluated commitments as percentage of bottleneck process output that enabled planning to actual capacity

- Developed module to monitor items from final stage of pre-production to prepare post-production plan
- Developing new system using Python and PostgreSQL for scalability and advanced analysis

*Organized team and developed system to record and trace incoming samples*

- Developed database to record relevant pre-development details of incoming samples
- Delegated specific responsibilities to team members to enhance system outcomes
- Held periodic meetings to incorporate feedback from system users to make necessary changes
- Recorded over 95% incoming samples information and increased productivity by 30%

*Led Safety program to improve safety and working environment on the shop floor*

- Organized team to conduct shop floor survey to understand department requirements
- Evaluated effectiveness of PPEs by taking feedback from users on various criteria
- Presented yearly projection for PPE cost to upper management.

**Hoffenstruct<sup>1</sup>, Ahmedabad, Gujarat, India**

2015 - 2016

*Developing assistive devices for spinal cord injury (SCI) population*

- Conducted primary and secondary market research
- Performed static analysis for various test cases
- Developed project plan for user-research, data gathering, prototype development, user-testing and manufacturing
- Identified cost drivers to budget product development
- Developed a value chain analysis of asset flow inside and outside of the organization
- Created a results chain to list inputs, activities, outputs, outcomes and impact

**VentureStudio, Center for Innovative Business Design, Ahmedabad, Gujarat, India**

2013 – 2015

*Research Associate and Coach*

- Conceptualized and executed program activities to train participants and evaluated using a decision-matrix that focused on various skills
- Devised a project management system and introduced workflows to manage and track various activities
- Prepared participants to use Gantt chart in Microsoft Excel and determine their venture objectives and structure time-bound actionable steps
- Introduced the House of Quality tool to assimilate data from primary and secondary market research and established design specifications and quantified them to set target specifications
- Participated in venture reviews to provide feedback and monitor progress
- Led initiatives to engage broader community to promote organization

**Intech Creative Services Pvt Limited, Gandhinagar, Gujarat, India**

2011- 2012

*Business Development Manager*

- Collaborated across various departments and used House of Quality matrix to devise project requirements and solution proposition
- Generated and qualified leads in the IT and shipping industry
- Met with potential customers to understand problems and devise requirements for potential projects

**Adler Mediequip Pvt Limited, Devrukh, Maharashtra, India**

2009 - 2011

*Design Engineer*

*Produce instrument prototypes for a spinal implant product*

- Used SolidWorks to develop 3D models of instruments to visualize configuration for space optimization in the instrumentation box
- Minimized raw material wastage and operational cost by determining raw material shape and size from completed 3D models
- Created step-by-step 2D drawings with machining, milling and drilling instructions to develop instrument prototypes from a block
- Designed a two-step mechanism instrument to insert a spacer for TLIF<sup>2</sup> and PLIF<sup>3</sup> surgery.

*Created animation for surgeon demonstration for fitting hip implant components*

- Analysed failure cases to determine design specifications in liner design for dislocation prevention
- Developed part models for the prosthetic femoral head, liner and acetabular shell of the hip joint
- Modelled instrument to fix prosthetic femoral head into the liner joined with the acetabular shell
- Created animation using SolidWorks® that demonstrated vertical insertion of liner into the femoral head to show interference fit and rotation along liner surface for hip movement

<sup>1</sup>An early stage venture and not a registered company

<sup>2</sup>TLIF: Transforaminal lumbar interbody fusion

<sup>3</sup>PLIF: Posterior lumbar interbody fusion

## EDUCATION

### Udacity

#### Predictive Analytics for Business Nanodegree

2019

##### [Predicting profit generated](#)

Linear regression model developed from training dataset to determine profit generated using Alteryx

##### [Creating an analytical dataset to develop model for a pet store](#)

Performed data cleaning operations and analysing dataset for outlier effect on a model

##### [Classification model for a bank loan](#)

Built classification models from training dataset using various machine learning algorithms and selecting one to determine eligible applicants for a bank loan

##### [Conducted an A/B test to predict impact of adding new menu items](#)

Performed A/B analysis over a time period from dataset to understand sales impact before implementing change across all stores

##### [Segmentation and clustering of stores and forecasting models](#)

Carried out segmentation and clustering of stores in a city and developed forecasting models for produce sales to minimize wastage

### Full Stack Web Developer Nanodegree

2019

##### [Map Project](#)

Developed a map using Google APIs and Knockout framework that filters and find locations from a list loaded from a data set

##### [Deploying web application on Linux Server](#)

Setting up a secure Linux Server to deploy a web-application using Apache and WSGI

##### [Web Application with CRUD operations](#)

Developed database using SQLAlchemy and a server application using a Flask framework

##### [Analysing a news database](#)

Create a report from a mock news database using PosgreSQL and Python

##### [Generating a website using python class](#)

Use of python class to generate a website of movie listing and trailers

### Purdue University, West Lafayette, IN

Major: Bachelor of Science, Mechanical Engineering

2005 - 2009

Minor: Global Engineering

### Department of Mechanical Engineering, Purdue University, USA

2008 - 2009

#### *Spine Simulator*

- Designed and implemented a six-axis platform to simulate spinal movements
- Designed manufactured machine to stress test disk replacements
- Contributed in the algorithm development to automate spine simulator

### Dept. Of Mechanical Engineering, Purdue University, IN, USA

2007 - 2008

#### *Research with Dr. Eric Nauman on Spine Mechanics*

- Researched and identified crucial points on human spinal vertebrae.

- Modelled vertebra of the human spine using COMSOL®, finite element modelling software.
- Performed stress analysis on the vertebra model.
- Developed 3D model of the human spine.

**Shanghai Jiao Tong University (SJTU), Shanghai, China**

Global Engineering And Research In Education (GEARE), Student Exchange Program

2008 - 2009

*Courses:* Design for Manufacture, Engineering Statistics for manufacturing, Material science engineering, Heat and Mass Transfer.

## HONORS

1. Completed World Bank course on developing innovative business models for sustainability and social impact - selected to be in top 100 out of 400 applications received globally (2015)
2. Thomas J. And Sandra H. Malott Innovation Award, Spine Simulator (2009)
3. John O. McCahon Scholarship, Dept. Of Mechanical Engineering, Purdue University (2008)
4. Global Engineering And Research In Education (GEARE) Scholarship, Purdue University (2008)
5. Summer Undergraduate Research Assistant Fellowship, Spine Mechanics, Purdue University (2007)
6. Purdue University Cricket Club player - Runner up of the Midwest Cricket Conference (2007)
7. Purdue University Cricket Club player - Winner of the Midwest Cricket Tournament (2007)

## VOLUNTEER WORK

**Wings of Angels (Dubai, U.A.E)**

1. Spreading awareness to build ramps for greater wheelchair accessibility

**Seva Café (Ahmedabad, India)**

1. Managed guests and discussed about the concept of pay forward.
2. Undertook kitchen responsibilities.