# **Tom Hatcher**

Burlington, NJ - Email me on Indeed: indeed.com/r/Tom-Hatcher/6043cb35275d7577

- · Seasoned design engineer with diverse experience
- 10+ years of medical device experience
- Managed development teams for products and processes

#### WORK EXPERIENCE

### **Staff Equipment Engineer**

- 2015 to Present

Managed Collagen Process Improvement Project - led a small team to upgrade an existing manufacturing process for an FDA approved medical device. The project required tight coordination between quality, regulatory, product development and process engineers.

- Managed transfer project up to process validation led a team of quality and process engineers transfer an
  existing process to a new facility, including equipment development, equipment qualifications and cleaning
  validations
- Assisted in the development of a new medical device product led effort in developing the formulation for the device chemical carrier; also assisted in executing development studies, patent searches and managing timelines
- Managed the process development effort for a new medical device using 3-dimensional printing and novel approaches for fusing resorbable polymers with ceramics
- · Designed spinal implant devices using SolidWorks and proprietary software by use of 3-dimensional printing
- Assisted in the development of 3-dimensional printers for the purpose of making implantable medical devices and pharmaceutical dosage forms

#### **Senior Process Engineer**

- 2011 to 2015

## **Consulting Project Engineer**

Advent Design - Bristol, PA - 2007 to 2008

Developed a medical tool for tensioning, crimping and cutting surgical cables

- Conducted design reviews with clients and provided technical support to sales
- Developed customer proposals, timelines and budgets
- Developed automated equipment using AutoCad, Solidworks and COSMOS FEA
- Performed mathematical analysis for other designers including motor sizing, dynamic analysis and FEA

## **Senior Mechanical Design Engineer**

MicroDose Technologies - Monmouth Junction, NJ - 2005 to 2007

Developed new technologies and produced prototypes

- Designed dry powder inhaler prototypes using SolidWorks and COSMOS FEA
- Wrote a white paper describing the acoustics properties driving the dry powder inhaler
- Assisted in the development of a new piezo actuator to maximum performance

#### Senior Engineer

Integra LifeSciences - Plainsboro, NJ - 2001 to 2005

and 2008 to present

## **Senior Engineer**

Pharmacopeia Labs - Princeton, NJ - 1999 to 2001

Designed laboratory equipment and robotic systems.

- Designed a Single Channel Reformatter to array compounds into microtitre plates
- Assisted in the development of an Automatic Reformatter
- Assisted in the development of an Automatic Dispenser for 1536 microtitre plates capable of 4% CV at 1uL and 30 seconds per plate

## **Consultant Design Engineer**

SmithKline Beecham Clinical Laboratories - King of Prussia, PA - 1997 to 1999

Designed automation equipment for laboratory analysis

- Coordinated projects and bid jobs through independent machine shops
- Designed modular conveyor systems for robotic interface, including "plug-and-play" gate assemblies

## **EDUCATION**

## **Bachelor of Science in Mechanical Engineering**

Drexel University - Philadelphia, PA