Resume

Andrey Degtyar – M. Sc. Mechanical Engineer

Personal info
Cell: 050-5742115
sdandrey@gmail.com

Education

2012-2018 M.Sc. Mechanical Engineer degree with thesis, Technion
Thesis title: "Flexible and Adaptable Ankle Foot Orthosis for Walking Style Correction of Post Stroke Patients."
Research and device development for support and healing of patients with foot drop syndrome. Performing clinical experiments on humans to prove the effectiveness of the device concept.

2004 – 2006 B.Sc. Mechanical Engineer degree accomplishment (after military service), Mechanics and Education Dept, Technion
1999 – 2002 B.Sc. Mechanical Engineer degree studies, Mechanics and Education dept, Technion
1994 – 1997 Metallurgic engineering studies at University, Ukraine

Employment History

2021 – … **Senior Mechanical Engineer at start up**

- Semi-automatic production lines design for medical devices assembled in clean room (ISO 8 Class 10000).
- Heat transfer problems solution.
- Existing production line stabilization and capacity increase for mass production.
- Mechanical design, sheet metal design, opto-mechanical design.
- New technology investigation and implementation.

2019 – 2020 Orthopedic device designed during M.Sc investigation and improvement

- Device enhancements based on the experiments data.
- Working with rehabilitation centers and hospitals on clinical experiments extension.
- Market and technology investigation

2012 – 2018 Mechanical and System Engineer at (B.Y.) Medimor Development Dept

- Automation and semi-automatic production lines design for medical devices assembled in clean room (ISO 7, ISO 8 Class 10000).
- Heat transfer problems solution.
- Existing products improvement and cost reduction.
- Products adaptation and redesign for mass production.
- Mechanical design, sheet metal design, opto-mechanical design. Plastic parts design for high and low pressure injection.
- ICT testers design.

2010 – 2011 R&D Mechanical Engineer at Mazor Robotics Development Dept

- Multidisciplinary medical equipment development, analysis and design.
- Sterile equipment development.
- Robots design, analysis and development.
- Mechanical design, sheet metal design, opto-mechanical design. Plastic parts design for high and low pressure injection, casting design.

2008 – 2010 R&D Mechanical and System Engineer at Sysmop Technologies Development Dept

- Multidisciplinary systems developing and design, optomechanical design
- Heat transfer, fluid mechanics, contact mechanics problems and dynamical systems behavior analysis.
- Mechanical design, sheet metal design, opto-mechanical design. Plastic parts design for high and low pressure injection.

2007 – 2008 R&D Mechanical Engineer at Sela Ltd Development Dept

- Vibration and strength problems solution for complexive machines from analytic models and simulations to solutions implementation.
- Mechanisms mechanical design.

2006 – 2007 Projects supervisor for Engineering mechanics course in Technion
2005 – 2006 Projects supervisor for Science Tech project in Technion

Industrial Projects

Electromechanical Microbiologic System
Microbes cultivation electromechanical system. Temperature differentiation between 24 vials is +/- 0.1 degree. The project included heat transfer analysis followed by solutions implementation in mechanical and plastic design. Plastic and mechanical design were performed using Solid Works.

Peristaltic Pump
Compact peristaltic pump 80mm x 60mm x 60mm. The pump enables fast and easy pipe changing and use of pipes with different diameters. The project included pipe mechanical design, strength and fluid analysis and solutions implementation. Mechanical design was performed using Solid Works.

Electromechanical Medical System
Blood vessels treatment electromechanical system. The system is based on a 1.5m robotic arm with 4 degrees of freedom. Placement accuracy is 1mm. Ultrasonic transducer is mounted on the arm end. The traducers' movement in space is measured by 4 potentiometers. The project included mechanical design, strength and dynamic analyses and solutions implementation. Mechanical design was performed using Solid Works

Military service
Full military service (according to requirements for new immigrants)
2002 – 2003 Arms school – practical engineers' final projects supervisor. System administrator in post high school dept.

Personal skills
Excellent technical skills, responsible, highly motivated, project development and managing ability

Programs (comprehensive knowledge)
MathCAD, Maple, Matlab, AutoCAD, Solid Works, Ansys, Pro Engineer, FeemLab, Coolit, Solid Edge, Inventor

OS: Windows 95/98/2000/NT/XP/2003/7 Server, DOS

Specialization Courses
Finite elements, micro systems mechanics, Vibrations theory, micro systems engineering, cooling and electromechanical components thermal management, solid state micro-mechanics, material failure, fracture mechanics, contact mechanics, introduction to continuum mechanics, applied thermo elastics, hydraulic and pneumatic systems design

Languages: Hebrew (mother tongue level), English, Russian (mother tongue)

Recommendations: the recommendations will be sent upon request