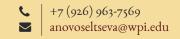
# Anna Novoseltseva



#### RESEARCH EXPERIENCE

JAN 2017 - AUG 2018

Worcester Polytechnic Institute, Worcester, MA, USA *Master's thesis* 

Application of strain gauges to da Vinci surgical robot instruments to measure applied forces for further implementation of haptic feedback. Electrical circuit design and control of the strain gages.

AUG 2014 - DEC 2016

Tomsk Polytechnic University, Tomsk, Russian Federation *Bachelor's thesis* 

Designed and developed the electronic circuit of the device for determining the location of hematomas using infrared spectroscopy. Programmed microcontroller STM32 in C for device control. Created a program for data analysis and acquisition using LabVIEW. Implemented RS232 serial communications between PC and developed device.

#### PROFESSIONAL EXPERIENCE

CURRENT, FROM SEPT 2018 (FT)

# NTO IRE Polus **Engineer**

This position involved development of new medical product for laser treatment, preparation of production process, design and development of the equipment supporting manufacturing facility, preparation of the manufacturing facility, database development and implementation for the manufacturing process.

SUMMER 2017, 2018 (FT)

# IPG Medical *Internship*

Research, development and testing of the new medical laser system for dermatology. Laser-tissue interaction experiments with biological tissue samples and phantoms.

SUMMER 2014 (PT)

# Medtekhnika, Ulan-Ude, Russian Federation *Internship*

Assisted in technical support of hospitals and clinics. Repaired medical equipment under the supervision of professionals.

#### REFERENCES

### Dr. Gregory S. Fischer

POSITION Professor

EMPLOYER Department of Mechanical Engineering

Worcester Polytechnic Institute

EMAIL gfischer@wpi.edu

#### **EDUCATION**

2016-2018 Master of Science

GPA: 3.9/4.0

Biomedical Engineering Worcester Polytechnic Institute

2011 - 2015 Bachelor of Science

GPA: 4.8/5.0

Biotechnical Systems and Technologies Tomsk Polytechnic University

#### **AWARDS**

2016 Fulbright Scholarship

Worcester Polytechnic Institute

2015 **1st Place Team in All-Russian Student Competition or**Tomsk Polytechnic University

#### COMPUTER SKILLS

BEGINNER Java, MS DOS

INTERMEDIATE Javascript, Python, HTML, CSS,

Microsoft Windows

Computer Hardware & Support

EXPERT Perl, Unix, LATEX

#### COMMUNICATION SKILLS

conferences Oral Presentation at the Annual MIT

Theoretical Physics Conference - 1987

POSTERS Poster at the Meeting of the American

Physical Society - 1985

## **SKILLS**

# Goal Oriented

I believe in action over long-winded discussions. I listen to everyone's viewpoints and use my judgement to immediately act based on consensus to achieve goals quickly and efficiently.

### Physical Dexterity

Manual manipulation of experimental equipment and training within Black Mesa (e.g. the Hazard Course) have contributed to an enjoyment of working with my hands.

#### Passionate

I have been interested in theoretical physics such as quantum mechanics and relativity from an early age. My education and research have cemented this interest into a passion. I greatly enjoy carrying out fundamental physics research with potential practical applications.

PHONE +1-508-831-5261

Dr. Eli Vance

POSITION Scientist (HLI)

EMPLOYER Black Mesa Research Facility

EMAIL e.vance@bmrf.us

PHONE +1 (800) 786-1410 x6235 (Work)

MOBILE +I (20I) 632-390I

## **PUBLICATIONS**

**Freeman, G. R.** (1996). Chemistry of Multiply Charged Negative Molecular Ions and Clusters in the Gas Phase: Terrestrial and in Intense Galactic Magnetic Fields. *The Journal of Physical Chemistry*, 100(II), 4331-4338.

Jacobsen, F. M., Gee, N., **Freeman, G. R.** (1986). Electron mobility in liquid krypton as function of density, temperature, and electric field strength. *Physical Review A*, *34*(3): 2329-2335.

1996 **doi:10.1021/jp951483**+

1990 doi:10.1139/p90-097

1986 doi:10.1139/v86-297

1986 doi:10.1103/PhysRevA.34.2329

First author publications in **bold**