Anna Novoseltseva

+7 (926) 963-7569
anovoseltseva@wpi.edu

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 on**
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 (HL1)
EMPLOYER Black Mesa Research Facility

EMAIL e.vance@bmrf.us
PHONE +1 (800) 786-1410 x6235 (Work)
MOBILE +1 (201) 632-3901

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*(11), 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**