# **Curriculum Vitae**



#### **Personal Data:**

| Name   | Surname | Telephone       | Fax             | E-mail  |
|--------|---------|-----------------|-----------------|---|
| Shirin | Yazdani | +98-411-3393391 | +98-411-3356008 | sh_yazdani@tabrizu.ac.ir<br>shiriny11@gmail.com |

### **Educational Background:**

| Certificate<br>Degree | Field of Specialization   | GPA       | Name of Institution<br>Attended | Date<br>Received |
|-----------------------|---|-----------|---------------------------------|------------------|
| PhD                   | Sport biomechanics  | 18.81/20  | Bu Ali Sina<br>University       | 2014             |
| M.Sc                  | Physical education and<br>sport science (Sport<br>Biomechanics) | 17.50/ 20 | Bu Ali Sina<br>University       | 2003             |
| B.S                   | Physical education and sport science                            | 16.28/20  | University of Tabriz            | 2000             |

#### **Title of Master Thesis:**

The effects of exercise therapy on dynamic postural control, trunk mobility and strength, and pain relief of patients with chronic low back pain

#### **Title of PhD Thesis:**

Trunk muscles' electromyography and kinematic and kinetic characteristics in gait of patients with adolescent idiopathic scoliosis during gait with and without load carriage "emphasis on symmetry of muscle function and right and left limbs"

#### **Teaching Experiences:**

| Title of Course                  | Level         | Dates |      | Name of Institution    |
|----------------------------------|---------------|-------|------|------------------------|
| The of Course                    | Level         | From  | То   | Name of Institution    |
| Sellected topics in biomechanics | Postgraduate  | 2016  | now  | University of Tabriz   |
| Biomechanics of sport            | Postgraduate  | 2012  | 2014 | Bu Ali Sina university |
| Labratuary in biomechanics       | Postgraduate  | 2012  | 2014 | Bu Ali Sina university |
| Biomechanics of sport            | undergraduate | 2004  | now  | University of Tabriz   |
| Kinesology                       | undergraduate | 2003  | now  | University of Tabriz   |
| Corrective exercise              | Undergraduate | 2009  | now  | University of Tabriz   |
| First aids                       | Undergraduate | 2006  | now  | University of Tabriz   |
| Computer (SPSS)                  | Undergraduate | 2006  | now  | University of Tabriz   |
| Labratuary in Physical Education | undergraduate | 2005  | now  | University of Tabriz   |

| Basketball                           | undergraduate | 2005 | now | University of Tabriz |
|--------------------------------------|---------------|------|-----|----------------------|
| Mesurment & Evaluation In P.E        | undergraduate | 2003 | now | University of Tabriz |
| Exercise Therapy                     | undergraduate | 2005 | now | University of Tabriz |
| Adapted Physical Education and Sport | undergraduate | 2003 | now | University of Tabriz |
| Track & Fields                       | undergraduate | 2003 | now | University of Tabriz |
| General Physical Fitness             | undergraduate | 2002 | now | University of Tabriz |

## Administrative Responsibilities:

| Job Title   | Place of Work  | Date                   |      | Name of Institution   |
|---|--|------------------------|------|---|
| Job Thie  | Place of work  | From                   | То   | Name of Institution   |
| Educational<br>Assistant  | University of Tabriz, Dep of Physical<br>Education & Sport sciences                                    | 2004                   | 2006 | University of Tabriz  |
| Head of<br>department   | Azad university of Bonab, Dep of<br>Physical Education & Sport sciences                                | 2003                   | 2008 | Azad university of<br>Bonab                                       |
| Head of<br>department   | University of Tabriz, faculty of Physical<br>Education & Sport sciences, motor<br>bihavior department  | 2016                   | now  | University of Tabriz  |
| Head of<br>department   | University of Tabriz, faculty of Physical<br>Education & Sport sciences, general<br>physical education | 2016                   | now  | University of Tabriz  |
| Manager of<br>holding<br>practical tests<br>of girls<br>(enterance<br>exam of<br>sanjesh<br>organization) | University of Tabriz   | 2016,<br>2011,<br>2010 |      | Sanjesh organization<br>9assessment and<br>training organization) |
| Inspector of<br>education<br>organization   | Education organization of East<br>Azarbayjan   | 2003                   | -    | Education organization<br>of East Azarbayjan                      |

# **Academic Positions:**

| Title of Desition     |                                  | Date |      | Numero of Terrettandian  |  |
|-----------------------|----------------------------------|------|------|--------------------------|--|
| Title of Position     | Field of Specialization          | From | То   | Name of Institution      |  |
| Assisstant Proffessor | Physical Education<br>Department | 2013 | Now  | University of Tabriz     |  |
| Lecturer              | Physical Education<br>Department | 2003 | 2013 | University of Tabriz     |  |
| Lecturer              | Physical Education<br>Department | 2003 | 2008 | Azad university of Bonab |  |

# **Thesis Supervision:**

| No | Full Name of<br>Student | Level  | Title of Thesis  | University                         | Year |
|----|-------------------------|--------|--|------------------------------------|------|
| 1  | Maryam<br>golparian     | master | Trunk muscles Electromyography of AIS<br>patients during forward and backward<br>perturbation in sitting and standing positions  | Azad<br>university of<br>Boroojerd | 2012 |
| 2  | Nafise<br>akbari        | master | Correlation between antrhropometric and<br>biomechanical charactrestics of girl swimmers<br>with crawl and frog swimming records   | Azad<br>university of<br>Boroojerd | 2012 |
| 3  | Sepide<br>Khamooshi     | master | EMG activity of knee muscles during open and closed chain exercises with different loads   | Azad<br>university of<br>Boroojerd | 2013 |
| 4  | Zahra<br>Ashkanifar     | master | Effects of rockerboard and PNF exercise on balance control of blind girls  | Azad<br>university of<br>Boroojerd | 2015 |
| 5  | Neda<br>Sahandi         | master | Effect of accuracy-speed exchange on kinematic and kinetic variables in gymnasts   | University of<br>Tabriz            | 2017 |
| 6  | Mobarake<br>Elhami      | master | Electromyographic activity of lower extremity<br>and trunk muscles in patients with cerebral<br>palsy during normal walking and walking with<br>visual, motor and cognitive dual tasks | University of<br>Tabriz            | 2018 |
| 7  | Nahide<br>abolhasani    | master | Effects of special physical training and<br>perceptual motor training programs on the gait<br>and the gross and fine motor skills of children<br>with cerebral palsy                   | University of<br>Tabriz            | 2018 |

# **Publications:**

### **Books**

| Title  | Type of Work |             | Publisher                    | Date of                        |  |
|--|--------------|-------------|------------------------------|--------------------------------|--|
|  | Translation  | Compilation |                              | Publication                    |  |
| Skeletal muscle (from molecule to movement)    | *            |             | Azad university<br>of Tabriz | 1388                           |  |
| Anatomy and biomechanics of lower<br>extremity |              | *           | Tanin danesh                 | 1397<br>(under<br>publication) |  |

## **Publications:**

# **Papers**

| Title of Paper   | Place of Publication                       | Date of<br>Publicati |
|--|--|----------------------|
| Dynamic balance of patients with low back pain under various conditions  | <b>Olympic Journal</b><br>(Persian)        | 2003                 |
| The assessment of the reliability of new dynamic stability platform<br>system for postural sway evaluation via disturbance of motor<br>control systems | Research on Sport<br>Sciences<br>(Persian) | 2005                 |

| The trunk muscle dysfunction during upright standing and<br>bending postures in low back pain patients before and after<br>treatment                | Sciences of movement<br>(Persian)                                      | 2005 |
|---|--|------|
| The evaluation of the deficits on dynamic postural control and<br>its correlation with lumbar mobility in females with chronic<br>low back pain     | journal of research in<br>rehabilitation science-<br>Isfahan (Persian) | 2009 |
| The effect of visual and vestibular inputs on postural control of patients with low back pain   | Gait & Posture 30S S1–<br>S153   | 2009 |
| Spatiotemporal variables of gait in patients with adolescent<br>idiopathic scoliosis and healthy subjects   | <b>Iauh sport</b><br><b>biomechanics journal</b><br>(Persian)          | 2015 |
| The relationship between anthropometric characteristics and<br>Crawl and Breaststroke performance in adolescent girl<br>swimmers                    | Iauh sport<br>biomechanics journal<br>(Persian)                        | 2016 |
| Comparison of plantar peak pressure and time to peak<br>pressure during normal walking between females with Genu<br>Recurvatum and healthy controls | MUK journal<br>(Persian)   | 2016 |
| The relationship between peak isokinetic torques of hip, knee<br>and ankle joints with single and double leg jump performance<br>in young men       | International Journal<br>of Sport Studies                              | 2016 |
| The relationship between isokinetic relative torque of hip,<br>knee and ankle joints with the height of guide leg jump in<br>young men              | <b>Iauh sport</b><br><b>biomechanics journal</b><br>(Persian)          | 2016 |
| Peak plantar pressure and time to peak plantar presure<br>during normal gait in subjects with chronic low back pain and<br>healthy controls         | Journal of<br>Anesthesiology and<br>Pain (Persian)                     | 2017 |
| Electromyographical activity of erector spinae and gluteus<br>medius muscles in patients with adolescent idiopathic scoliosis<br>during gait        | Medical journal of<br>Tabriz university<br>medical science             | 2017 |
| The analysis of ground reaction force during gait in patients<br>with adolescent idiopathic scoliosis and normal control<br>subjects                | Medical journal of<br>Mashhad<br>university(Persian)                   | 2017 |
| Effect of chronic idiopathic low back pain on the kinetic gait<br>characteristics in different foot masks   | Journal of<br>Biomechanics   | 2018 |
| Postural sways of subjects with genu recurvatum during manipulation of visual and proprioceptive systems  | Under review: Journal<br>of Bodywork &<br>Movement Therapies           | 2019 |
| Power generation and absorption during normal walking in patients with adolescent idiopathic scoliosis and healthy controls                         | Under review: sport<br>science research center                         | 2019 |
| kinematic analysis of gait in adolescent idiopathic scoliosis   | Under review: Gait and posture journal                                 | 2019 |
|   |  |      |

| Title of the paper   | Title of the conference   | Date and<br>place |
|--|---|-------------------|
| The assessment of postural control and isometric trunk muscle<br>force in female patients with chronic low back pain and able-<br>bodied subjects                        | From the basic motor<br>control to functional<br>recovery   | Sofia,<br>2007    |
| How does balance training program may improve postural<br>control in dynamic condition and trunk mobility among<br>chronic low back pain patients?                       | Proceeding -1<br>Turkey   | 2008              |
| Postural control of patients with LBP on the semidynamic<br>base of support: emphasis on visual inputs   | 1th congress of Physical<br>Education and Sport<br>Science, Iran, Sanandaj                                  | 2010              |
| Hip, knee and ankle joints power generation and absorption<br>during normal walking in patients with adolescent idiopathic<br>scoliosis and healthy controls             | Second Sports and<br>Health Applied<br>Sciences Conference,<br>Shahid madani                                | 2016              |
| The comparison of peak isokinetic torque and time to peak<br>isokinetic torque between dominant and none dominant leg in<br>university of Tabriz elite volleyball player | Second Sports and<br>Health Applied<br>Sciences Conference,<br>Shahid madani                                | 2016              |
| Effects of aqua exercise with and without resistance on strength and range of motion in lower – limb of elderly women  | Second Sports and<br>Health Applied<br>Sciences Conference,<br>Shahid madani                                | 2016              |
| The relationship between perceived motivational climate and sport Commitment in elite athletes of Tabriz city  | Second Sports and<br>Health Applied<br>Sciences Conference,<br>Shahid madani                                | 2016              |
| The relationship between coaches' leadership styles and Sport<br>Commitment in Elite Athletes of Tabriz city   | Second Sports and<br>Health Applied<br>Sciences Conference,<br>Shahid madani<br>university of<br>Azarbayjan | 2016              |

## **Confrence presentations:**

|   | Title of Paper   | Title and Place of Assembly  | Date |
|---|--|--|------|
| 1 | Ground Reaction Force and Paraspinal and Gluteus<br>Medius Muscle Activities during Gait in Patients with<br>Mild and Sever Idiopathic Scoliosis | ISPESCONGRESS, 2018<br>TURKEY, Istanbul  | 2018 |
| 2 | Reliability of two new teacher-made tests for the assessment of accuracy in snooker  | ISPESCONGRESS, 2018<br>TURKEY, Istanbul  | 2018 |
| 3 | Study of successful implementation in the pirouette's movement of gymnastics with two fast and slow speeds                                       | 11 <sup>th</sup> international congress on<br>sport science, Tehran Iran<br>(Tarbiat Modares university) | 2018 |
| 4 | Lower extremity kinematics in patients with idiopathic<br>scoliosis and healthy controls during gait with and without<br>load carriage           | 9 <sup>th</sup> international congress on sport<br>science, Tehran Iran (Shahid<br>Beheshti university)  | 2016 |

| 5  | Hip, knee and ankle joints power generation and<br>absorption during normal walking in patients with<br>adolescent idiopathic scoliosis and healthy controls                  | Second Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan | 2016 |
|----|---|--|------|
| 6  | The comparison of peak isokinetic torque and time to peak<br>isokinetic torque between dominant and none dominant<br>leg in university of Tabriz elite volleyball player      | Second Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan | 2016 |
| 7  | The relationship between perceived motivational climate<br>and sport Commitment in elite athletes of Tabriz city  | Second Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan | 2016 |
| 8  | Effects of aqua exercise with and without resistance on strength and range of motion in lower – limb of elderly women   | Second Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan | 2016 |
| 9  | The relationship between coaches' leadership styles and<br>Sport Commitment in Elite Athletes of Tabriz city  | Second Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan | 2016 |
| 10 | Kinematic analysis of Zuki technique in young beginner<br>females: the effects of internal versus external focus of<br>attention during constant, blocked and random practice | MOHE 2015 congress on<br>movement, health and exercise<br>2015, Malaysia, Penang                   | 2015 |
| 11 | Three-Dimensional kinematic analysis of gait in patients<br>with adolescent idiopathic scoliosis and healthy controls   | MOHE 2015 congress on<br>movement, health and exercise<br>2015, Malaysia, Penang                   | 2015 |
| 12 | EMG Activity of deltoid and supraspinatus muscles during slow and fast shoulder abduction   | First Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan  | 2015 |
| 13 | Symmetry of spatiotemporal variables during gait in adolescent girls  | First Sports and Health Applied<br>Sciences Conference, Shahid<br>madani university of Azarbayjan  | 2015 |
| 14 | Electromyographic activity of erector spinea and gluteus<br>medius muscles in adolescent girls during gait with and<br>without load   | Mohaghegh Ardebili university  | 2015 |
| 15 | EMG activity of knee extensor and ankle plantar flexor<br>muscles during squat with and without load  | 8th international congress of<br>physical education and sport<br>science-Iran-Tehran               | 2015 |
| 16 | Effects of medical sole and sole with complex incline on kinematics of pes cavuse females   | Fist national congress of Physical<br>Education and Sport Science, Iran-<br>Malayer                | 2015 |
| 17 | Comparison of static and dynamic balance in patients with<br>Genuvarum and healthy controls   | Fist national congress of Physical<br>Education and Sport Science, Iran-<br>Malayer                | 2015 |
| 18 | The ratio of hip extensor to ankle plantar flexors during squat   | Fist national congress of Physical<br>Education and Sport Science, Iran-<br>Malayer                | 2015 |
| 19 | PREVALENCE, TYPE AND POSSIBLE CAUSESE OF<br>SPORT INJURIES IN IRANIAN ELITE MALE<br>BOULDERING ROCK CLIMBERS  | Antalya, turkey  | 2010 |
| 20 | Postural control of low back pain patients in standing with<br>twisted trunk before and after exercise therapy  | MCC2010, bolgaria  | 2010 |
| 21 | Postural control of patients with LBP on the semidynamic<br>base of support: emphasis on visual inputs  | 1th congress of Physical Education<br>and Sport Science, Iran, Sanandaj                            | 2010 |
| 22 | The comparison of dynamic balance in female futsal players with and eithout chronic ankle sprain  | 7 <sup>th</sup> international congress on sport<br>science, Tehran- Iran                           | 2010 |
| 23 | Effects of balance training program on falling risk and postural control of elderly women   | MCC2009- Bolgaria  | 2009 |
| 24 | The effect of visual and vestibular inputs on postural  | ESMCE, london  | 2009 |

|    | control of patients with low back pain  |  |      |
|----|---|--|------|
| 25 | Effect of trunk twisting on postural control in healthy females   | 1 <sup>th</sup> national congress of sports<br>biomechanics – Kerman   | 2009 |
| 26 | How does balance training program may improve postural<br>control in dynamic condition and trunk mobility among<br>chronic low back pain patients?  | The 10 <sup>th</sup> international congress in<br>Turkey (Bolu)  | 2008 |
| 27 | Interaction between spine range of motion and postural sways in patients with chronic low back pain   | The 6 <sup>th</sup> Internasional Congress on<br>Physical Education and Sport Science,<br>Iran                       | 2008 |
| 28 | The assessment of postural control and isometric trunk<br>muscle force in female patients with chronic low back<br>pain and able-bodied subjects  | MCC2007 Confrence- Sofia,<br>Bolgharia   | 2007 |
| 29 | Effect of therapeutic exercise on postural control and proprioception in LBP patients   | 14 <sup>th</sup> multi-disciplinary Iranian<br>Researchers Confrence in Europe-<br>Liverpool John Moorse University  | 2006 |
| 30 | Postural control during visual and proprioception<br>perturbation among femalee and male patients with<br>chronic low back pain and healthy control subjects: a<br>control study with follow up | International congress in biomechanics<br>- Canada, Waterloo   | 2006 |
| 31 | Comparison of isometric trunk muscle strength of patients with LBP  | 14 <sup>th</sup> multi-disciplinary Iranian<br>Researchers Confrence in Europe -<br>Liverpool John Moorse University | 2006 |
| 32 | A study of the effect of anthropometric chracteristics on the<br>physical fitness test of Tabriz University <sup>,</sup> students   | The 5 <sup>th</sup> Internasional Congress on Physical<br>Education and Sport Science, Iran                          | 2006 |
| 33 | Comparison of physical fitness of students in university of Tabriz<br>in three age level and preparing test norm  | The 5 <sup>th</sup> Internasional Congress on Physical<br>Education and Sport Science, Iran                          | 2006 |
| 34 | Effect of 3 month exercise therapy on low back pain and postural sways in chronic LBP patients  | The 5 <sup>th</sup> Internasional Congress on<br>Physical Education and Sport Science,<br>Iran                       | 2006 |
| 35 | Postural deformities of trunk in guidence school girls of Hashtroud   | The 3 <sup>th</sup> Scientific Congress of Physical Education Students-Mashhad                                       | 2005 |
| 36 | A survay on causes of sport injuries in footbal players in 2<br>different age groups of Teraktorsazi club   | The 3 <sup>th</sup> Scientific Congress of Physical<br>Education Students- Iran, Mashhad                             | 2005 |
| 37 | A survay on prevalence of sport injuries in footbal players   | Ali abad katool azad university  | 2005 |
| 38 | How does low back pain influence the center of mass deviations<br>from center of base of support in various dynamic conditions?   | 8 <sup>th</sup> Annual Congress of the ECSS-<br>Salzburg   | 2003 |
| 39 | Interaction between exercise therapy, trunk muscle strength and low back pain   | 4 <sup>th</sup> International congress of Physical<br>Education & Sport sciences, Iran                               | 2004 |
| 40 | Isometric flexor and extensor trunk muscle strength of patients<br>with low back pain in three different postures   | 1 <sup>th</sup> Congress of Health improvement<br>Esfahan Medical Science University                                 | 2003 |
| 41 | Validity of dynamic stability platform system under various conditions  | The 5 <sup>th</sup> national congress of Physical<br>Education& Sport Science- Shahid<br>Chamran Ahvaz University    | 2003 |

In many of papers presented in confrences, I was first author.

**Research Activities:** 

|  |   | Dates |      |  |
|--|---|-------|------|--|
| Title of Project   | Place of Work   | From  | То   |  |
| The assessment of the physical fitness of Tabriz University's students and related evaluation protocol   | University of<br>Tabriz                                 | 2003  | 2005 |  |
| The assessment of the motivative factors on choosing a particular branch of Karate and lack of success on its continuation in Tehran's Karate athlets  | Sport science<br>research cente<br>(SSRC in<br>Tehran). | 2003  | 2005 |  |
| Prevalence of postural defecits in Iranian girls and boys<br>students in 2 different age groups and comparison of physical<br>and motor fitness characteristics between students who have<br>postural deformity and healthy controls | Sport science<br>research cente<br>(SSRC in<br>Tehran). | 2009  | 2010 |  |
| Peak plantar pressure distribution during gait in chronic low<br>back pain patients and healthy controls   | University of<br>Tabriz                                 | 2016  | 2017 |  |

# **Research Interests:**

Balance, posture, and rehabilitation in different clinical conditions, Biomechanical analysis (Kinematics, kinetics and EMG)

### **Honorary Degrees:**

| Title  | Country | Year |
|--|---------|------|
| Reffery Certification of Badminton                 | Iran    | 2004 |
| Coaching of Track and Field (degree3)              | Iran    | 2002 |
| Coaching of Track and Field (degree2)              | Iran    | 2005 |
| Coaching of basketball                             | Iran    | 2005 |
| International Para athletics classifier (degree 2) | Iran    | 2016 |
| national sitting basketball classifier (degree 2)  | Iran    | 2019 |
|  |         |      |

Nationam paraathletics coach in Asian 2018 games (Jakarta 2018)

#### Membership to Scientific Associations:

| Name of Institution/Association                            | Position Held  | Country | Year |
|--|----------------|---------|------|
| Member of physical education and sport science assosiation | Central member | Iran    | 2006 |

#### Language Proficiency:

| Longuage | Degree of Proficiency |         |          |  |  |  |  |
|----------|-----------------------|---------|----------|--|--|--|--|
| Language | Writing               | Reading | Speaking |  |  |  |  |

|         | Native | Good | Fair | Poor | Native | Good | Fair | Poor | Native | Good | Fair | Poor |
|---------|--------|------|------|------|--------|------|------|------|--------|------|------|------|
| Persian | *      |      |      |      | *      |      |      |      | *      |      |      |      |
| Turkish | *      |      |      |      | *      |      |      |      | *      |      |      |      |
| English |        | *    |      |      |        | *    |      |      |        |      | *    |      |

# **Work Experience or Research Activities**

I have worked with Vicon nexus system, force plate (Kistler) and electromyography since 3 year ago. Also I know about Polygon software and SPSS.

# "Workshop certificate"

| Title                         | Place   | Date |
|-------------------------------|---|------|
| Kinesiologic electromyography | Sport science research center(SSRC in Tehran) | 2009 |
| Isokinetic system             | Sport science research center(SSRC in Tehran) | 2009 |
| SPSS                          | Bu Ali Sina University                        | 2003 |
| Sport for fatty people        | University of Tabriz                          | 2017 |

#### Workshops

| Title  | Place   | Date             |
|--|---|------------------|
| SPSS   | University of Tabriz  | 2014, 2015, 2016 |
| Corrective exercise for physical education students                                  | University of Tabriz  | 2015, 2016, 2017 |
| Corrective exercise for physical education teachers                                  | Education organization<br>of East Azarbayjan<br>provience     | 2015, 2016, 2017 |
| Ergonomy in working invironment  | University of Tabriz  | 2016,2017        |
| General exercise consideration and preventing sport<br>injuries in disabled athletes | Sport and youth organization                                  | 2017             |
| Surface EMG  | Research center of<br>physical education and<br>sport science | 2018             |