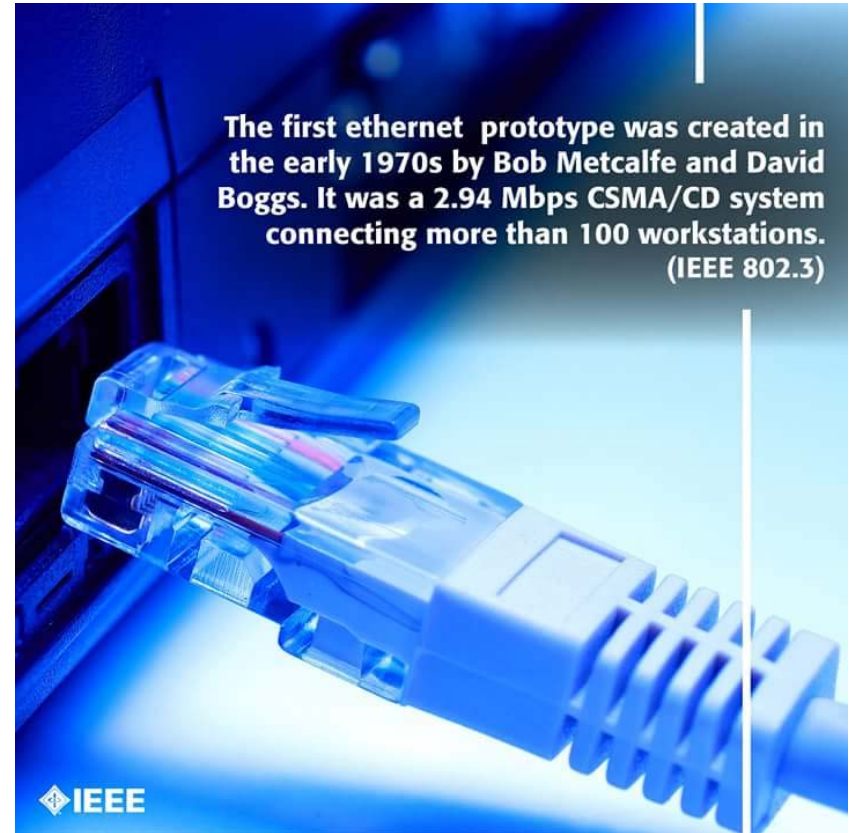# Students and Young Professionals get together

Dr. Yancho Todorov – Chair YP Bulgaria

What is IEEE ?

Wi-Fi® (IEEE 802.11) was developed by using technology from a failed experiment attempting to detect mini black holes.

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The first ethernet prototype was created in the early 1970s by Bob Metcalfe and David Boggs. It was a 2.94 Mbps CSMA/CD system connecting more than 100 workstations.
(IEEE 802.3)

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What is IEEE ?

> IEEE is the world's largest non-profit professional association for engineering dedicated to advancing technological innovation and excellence for the benefit of humanity.

> IEEE is designed to serve professionals involved in all aspects of the electrical, electronic and computing fields and related areas of science and technology that underlie modern civilization.

> It was formed in 1963 by the merger of the Institute of Radio Engineers (IRE, founded 1912) and the American Institute of Electrical Engineers (AIEE, founded 1884).

> It has the most members of any technical professional organization in the world, with 500 000 members in around 160 countries.

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Resources of IEEE - Publishing

› Publishing:

- IEEE is by far the most-cited publisher of new patents, IEEE journals and conference proceedings.

- IEEE produces 30% of the world's literature in the electrical and electronics engineering and computer science fields, publishing well over 100 peer-reviewed journals.

- The **IEEE *Xplore® digital library*** provides access to over 4 million documents including research articles, standards, transactions and conference publications.

   http://ieeexplore.ieee.org

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Resources of IEEE - Publishing

› Publishing:

- IEEE members have free access to E-books Classics (without additional subscription cost) to more than 299 eBooks from the IEEE Press collection through **IEEE Xplore®**. The eBook collection spans a number of today's technologies across 15 different content areas.

- IEEE and John Wiley & Sons, Inc., have partnered to offer you online access to more than 700 eBooks via the **IEEE Xplore® digital library**, as well.

- The IEEE-Wiley eBooks Library focuses on the content areas that lead today's cutting-edge technologies and help set the standards for future advancements.

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Resources of IEEE - Publishing

Resources of IEEE - Conferences

› IEEE publishes more than 1,100 leading-edge conference proceedings every year.

› These conferences are recognized by academia and industry worldwide as the most vital collection of consolidated published papers in electrical engineering, computer science, and related fields.

› The papers are authored by innovators of today's top emerging technologies.

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IEEE Standard Association

› IEEE is a leading developer of industrial standard with a portfolio of more than 900 active standards and more than 400 standards in development.

› IEEE standards affect a wide range of industries including: power and energy, biomedical and healthcare, Information Technology (IT), telecommunications, transportation, nanotechnology, information assurance, and many more.

› The IEEE-SA cooperates with standards developing groups throughout the world in preparing standards encompassing areas of interest within the IEEE.

http://standards.ieee.org/

IEEE in Bulgaria

❯ The **IEEE Bulgaria section** has been founded in 1995.

❯ Within the IEEE Bulgaria section exist:

- **9 Technical Chapters:**
  - Joint ED/ MTT/AP/CPMT Chapter;
  - SP Chapter;
  - CAS Chapter;
  - Computer Chapter;
  - Joint IM/CS/SMC Chapter;
  - Communications Chapter;
  - Joint ED/SSC Varna Chapter;
  - CIS Chapter;
  - RA Chapter
- **1 Student Branch**
- **Young Professionals Affinity** group

Positioning of YP AG

› **IEEE Young Professionals** is an international community of enthusiastic, dynamic, and innovative members and volunteers. IEEE is committed to helping young professionals evaluate their career goals, polish their professional image, and create the building blocks of a lifelong and diverse professional network.

› Affiliation with **IEEE Young Professionals** is open to *Graduate Students* and *higher grade members* with early career interests at **no additional cost**.

› **IEEE Young Professionals** provides career advantage resources and helps members leverage the power of the global network through its expanding Affinity Groups and volunteer opportunities.

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Resources of YP AG

› **Membership include:**

- Access to the global **IEEE Young Professionals** network and events.

- Seminars/Webinars on professional development, technical topics and humanitarian initiatives.

- Monthly tools and tips introducing career based products and new focus areas of the **IEEE Young Professionals**.

- *Local technical activities*: conferences, seminars and workshops related to business/academia achievements.

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Benefits joining YP Community

❯ **Keeping Technically Current**

- IEEE has the means for you to remain technically current through award winning publications, and technical societies.

    - **e-Book Classics, IEEE *Xplore®* Digital Library, IEEE Standards, IEEE.tv, Conference Proceedings, Societies Membership**

❯ **Career Resources and Recognition**

- You can keep your career moving in the right direction with IEEE career benefits and resources.

    - **myIEEE, Resume Lab, IEEE Job Site, Student Awards, Scholarships, Fellowships, Certification Portal**

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Benefits joining YP Community

› **Professional Networking**

- With other IEEE members who share similar interests, every member can build a network revolving around your profession, industry or projects.
  - **IEEE Conference discounts, GoogleApps@IEEE, Online Communities**

› **Continuing Education**

- Keep growing with IEEE continuing education benefits and other educational opportunities available to IEEE members. These resources allow you to acquire new skills and advance your professional development.
  - **Student/ Professional Travel Grants**

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YP activities & resources

› ***STEP program*** (Student Transition and Elevation Partnership)-facilitating the transition from Student member to young professional.

› Seminars & Lectures (including IEEE funding for invitation internationally recognized outstanding speakers)

› Meetings, Social Events and Gatherings

› Soft Skills workshops (communication and interpersonal skills , managing people, leadership competences)

› Industrial visits.

Funding is available through various IEEE programs and sponsors!

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What we have done up until now?

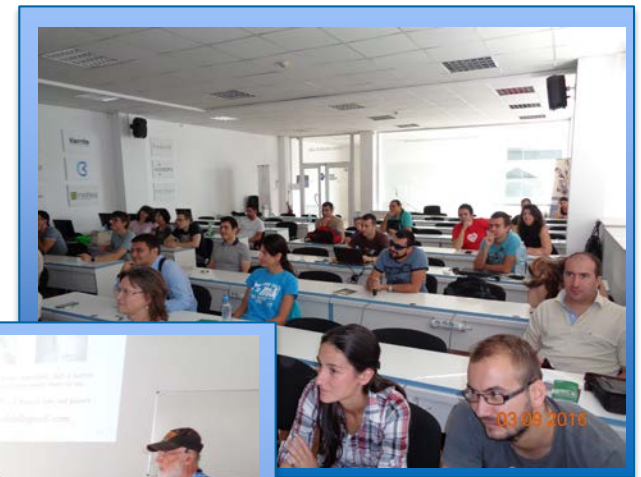> YP Talks 1 @ TU – Gabrovo

> YP Talks 2 @ TU – Plovdiv

2015

2016

What we have done up until now?

❯ Seminar on Computational Intelligence with the IEEE Fellow, James C. Bezdek (2016)

What we have done up until now?

› IEEE Summer School on Systems, Man and Cybernetics (2016)

What we have done up until now?

› IEEE Day Celebration with technical meeting on robotics (2016)

Resources for Students-Competitions

› **Student Web Site Contest**

- The IEEE Student Branch Web Site Contest is conducted by the IEEE MGA Student Activities Committee. This committee oversees IEEE student programs and activities of IEEE Student Branches. Deadline: each 22 April. Prizes: First place: US$1,000, Second place US$ 750, Third place US$ 500,

› **IEEEXtreme Programming Challenge**

- IEEEXtreme is a global challenge in which teams of IEEE Student members— advised and proctored by an IEEE member, and often supported by an IEEE Student Branch— compete in a 24-hour time span against each other to solve a set of programming problems.

Resources for Students

> ## Continuing Education

- Keep growing with IEEE continuing education benefits and other educational opportunities available to IEEE members. These resources allow you to acquire new skills and advance your professional development.
  - **Student Conference Travel Grants**
  - **Student Fellowships/Grants**
  - **Student's Mentoring**

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Resources for Students- Fellowships/Grants

› **IEEE Computational Intelligence Society Conference Travel Grants:** This program offers a number of travel grants to assist IEEE Student members presenting papers at IEEE NNS (Neural Networks Society) sponsored conferences.

› **IEEE Computational Intelligence Society Summer Research Grant:** The program offers scholarships of US$1,000 to US$4,000 for deserving graduate students who need financial support for their research during a summer period.

› **IEEE Computer Society Merwin Scholarship:** This scholarship recognizes and rewards active leaders in the IEEE Computer Society Student Branch Chapters. Up to 20 US$2,000 scholarships are available and awarded on an annual basis.

› **IEEE Dielectrics and Electrical Insulation Society Graduate Student Fellowship:** This fellowship was designed to support graduate research in the area of insulation or dielectrics. Two US$7,500 or three US$5,000 scholarships are awarded annually.

› **IEEE Electron Devices Society Graduate Student Fellowship:** This program promotes, recognizes, and supports graduate-level study and research within EDS, with at least one fellowship awarded to students in each of the main geographic regions: Americas, Europe/Mid-East/Africa, Asia/Pacific.

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Resources for Students-Fellowships/Grants

› **IEEE James C. Klouda Memorial Scholarship Award:** The IEEE James C. Klouda Memorial Scholarship awards a scholarship to a qualified undergraduate student who seeks an electrical engineering degree with emphasis in the field of electromagnetic compatibility or a related discipline, from an accredited US university or college.

› **IEEE Life Member Graduate Study Fellowship in Electrical Engineering:** This renewable US$10,000 fellowship is awarded annually to a first-year, full-time graduate student obtaining his or her master's degree for work in the area of electrical engineering, at an engineering school/program of recognized standing worldwide.

› **IEEE Masters Student Fellowship:** This one-year fellowship is awarded to promote, recognize, and support graduate masters-level study and research within the Electron Devices Society's field of interest. The prize is US$2,000 and a plaque to the student, to be presented by the dean or department head of the student's enrolled graduate program.

Potentials Magazine

IEEE Potentials Magazine is the publication dedicated to undergraduate and graduate students and young professionals.

IEEE Potentials explores career strategies, the latest in research, and important technical developments. Through its articles, it also relates theories to practical applications, highlights technology's global impact, and generates international forums that foster the sharing of diverse ideas about the profession.

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IEEE Student branch awards

> **IEEE Student Enterprise Award -**The IEEE Student Enterprise Award provides financial help to Student members who are looking to implement an idea for a project. It enables IEEE Student members to work with others on an engineering project, while simultaneously strengthening Student Branch programs. Topics may be of a technical or non-technical nature from research on cutting-edge technology, humanitarian, and community-service programs.

> **Larry K. Wilson Regional Student Activities Award -** The purpose of this award is to recognize, annually, in each Region of the IEEE, the Student member most responsible for an extraordinary accomplishment associated with Student Activities. The value of a Student member who shows a pattern of dedication and ongoing service to a Student Branch/Student Branch Chapter is certainly recognized. The award is designed to reward a particular event, program, or product of IEEE Student Activities. It is sponsored by the IEEE Member and Geographic Activities (MGA) Board.

> **IEEE Regional Exemplary Student Branch Award -** The purpose of this award is to provide public recognition of exemplary IEEE Student Branch operations.

> **The Darrel Chong Student Activity Award -** The purpose of this recognition system serves to change the mindset of our student groups from being number-driven to becoming value-driven and to acknowledge exemplary student activities around the world. The goal is to improve the quality of activities and to foster knowledge sharing among students.

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STEP funding – YP's and Students

✓ **STEP -** IEEE STEP was developed to provide a dynamic program for facilitating the transition from Student member to young professional by introducing the opportunities and benefits of IEEE membership.

✓ **Requirements:** writing an application, minimum attendance: 10 students. More funding available if more than 25 students attend!

✓ **Format?**

- **Mini technical meeting/conference.**
- **YP's will deliver lectures on technical/non-technical subjects.**
- **Student's technical poster session with prizes.**
- **Social diner.**

Promo codes 2017

✓ **Free 2017 membership in Industry Application Society:**

- **IASMBR2017**

✓ **Free 2017 Student membership in Power and Energy Society:**

- **PES17STUAD**

How to get in touch with YP's?

> **Contacts**
>   - **Web:** http://yp.ieee.bg
>
>   - **LinkedIN:** IEEE Young Professionals Bulgaria
>
>   - **Facebook:** https://facebook.com/groups/yp.ieee.bg
>
>   - **Twitter:** @ypbulgaria
>
>   - **E-mail:** yp@ieee.bg, yp_bulgaria@ieee.org

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