TOSHIBA GLOBAL INTERNSHIP PROGRAMME

- **Qualification**
  - Student who will graduate before November 2020
  - Further qualifications required depending on the position.
  - Students with following engineering background may better match the positions.
    - Computer Science/ Engineering
    - Electrical and Electronic Engineering
    - Information Engineering/ Technology
    - Mechanical Engineering/ Mechatronics

- **Internship Period:**
  - November 13, 2019– January 30, 2020
  - December 10, 2019 – January 30, 2020
  - January 6, 2020 – January 30, 2020

  *Indicate all the available periods through the application form.

Application Guidelines & Position List

Priority is given by Toshiba to PolyU students for the following positions, for other positions, please refer to the link above or the attached file.

205542 Sales Engineer (Railway rolling stock system)
205510 Oversea Technical Planner (Elevator & Escalator)

- **Application process:**
1. Students are strongly encouraged to contact CAPS colleague, Ms Cynthia Lam (cynthia.py.lam@polyu.edu.hk), to understand the selection process and gain career advice.
2. At the same time students have to apply online through Toshiba Online Application system
   - Fill in internship application form
   - Documents to upload: Profile photo, Resume (PDF) and Academic record for all semesters (transcript or mark sheet, PDF)

Application deadline: 20 August, 2019 at 7am (JST)

Toshiba Global Internship 2019

Committed to People,
Committed to the Future.

Toshiba group is a diversified electric/electronic manufacturer and provides a wide range of products and services on a global basis in four business domains: Energy, Social Infrastructure, Electronic Devices and Digital Solutions.

Interns in Toshiba group work on hands-on projects that contribute to a better society. You'll have the opportunity to gain valuable experience from applying what you have learned in university to real work, and also experience life in Japan.

In addition to an opportunity to understand Toshiba's work culture, this could also be your first step to considering the prospect of a career with Toshiba group in Japan. **For successful interns, there is the possibility of full-time job offer.**

【Internship Program】

1. Period
   The internship will be carried on during one of the following 3 periods depending on the requirements of each position. Please indicate all your available period through the application form.
   - **November 13, 2019– January 30, 2020**
   - **December 10, 2019 – January 30, 2020**
   - **January 6, 2020 – January 30, 2020**

2. Qualification
   - Student who will graduate before November 2020 or with less than 3-year work experience.
   - Strong interest in Toshiba group.
   - Effective English communication skills.
   - Further qualifications required depending on the position.

3. Location: Toshiba group factory or office **in Japan**

4. Package:
   - Round-trip flight ticket between your country and Japan
   - Visa acquisition (if necessary)

- Accident insurance in Japan
- Daily meal allowance: 2,500 yen/day
- Transportation allowance in Japan related to internship
- Accommodation in a Toshiba dormitory
- Toshiba Global Intern Lifestyle Guide
- Personal Mentorship Program

【How to apply】

1. Create an account at [Toshiba Online Application system](#)

2. Fill in and submit Internship Application Form

3. Prepare and upload the following documents:
   - Profile photo.
   - Resume (PDF)
   - Academic record for all semesters (transcript or mark sheet) (PDF)

Toshiba Online
Application System

Application deadline: **20 August, 2019 at 7am (JST)**

*All applications will be reviewed after the deadline. Successful candidates will be invited to an interview. The Selection will be completed by the end of October 2019.

For further information, please visit our website at
http://www.toshiba.co.jp/saiyou/international/internship/

Position List

Engineer Intern Positions
Click Job No. to see details of the position.

Job No.	Business Domain	Position	Internship Project
205553	Social Infrastructure	Design & Development Engineer	Evaluation for power electronics equipment
205542	Social Infrastructure	Sales Engineer	Railway rolling stock system
205510	Elevator & Escalator	Oversea Technical Planner	Overseas product planning
205526	Elevator & Escalator	Design & Development Engineer	Software development for Elevator control system
205557	Electronic Devices	Application Engineer	Application test of power devices

R&D Intern Positions
Click Job No. to see details of the position.

Job No.	Research Center	Laboratory	Research Field
205491	Research & Development Center	Media AI Laboratory	Computer Vision and Speech Recognition
205535	Research & Development Center	Analytics AI Laboratory	Data Analytics System & Service
205520	Software Engineering & Technology Center	Open Source Technology Department	Software/ Middleware Using Linux or Web Application Frameworks/ Libraries
205543	Manufacturing Engineering Center	Optical Technology Research Department	Automatic Image Inspection Using AI and Image Processing

Engineer Intern Positions

Social Infrastructure Business Domain

To Realize a Sustainable Society with Safety, Security and Reliability

Toshiba Group aims to realize a sustainable society that is safe, secure and reliable through our solutions for Public Infrastructure, Building & Facilities and Transportation and Industrial Systems all over the world.

For public infrastructure, we offer systems and solutions for water supply and sewerage, highways, disaster prevention, broadcasting, telecommunications, security and automation. For Transportation and Industrial Systems, we offer high value-added systems and solutions for railways, motors & inverters, rechargeable batteries and automotive devices. Also, we offer retail & printing solutions to support businesses for stores, logistics and offices.

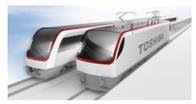| Company	Toshiba Infrastructure Systems & Solutions Corporation (TISS)
Job No.	205553
Position	Design & Development Engineer
Location	Fuchu, Tokyo
Products	Power electronics equipment (Motor drive inverter, Power converter, Wireless Power Transfer, Charge-discharge device, Power conditioner)
Internship Project	Evaluation for power electronics equipment • Research and verification of advanced technologies • Analog circuit design of power electronics equipment • Design of control circuits including microcomputers, digital circuits and software • Design of machine structures • Evaluation and verification of prototypes.

	You will gain experience in the following: • Innovative product design & development process in Toshiba Group • Experience of evaluation test for the prototype • Experience of improving evaluation test methods
Essential Requirements	• Bachelor's or higher degree in Mechanical Engineering, Electrical and Electronic Engineering, Control Engineering, Computer Engineering or related field • Knowledge of control theory or software technology • Excellent English communication skills
Preferred Capabilities	• Working knowledge of simulation software such as PSIM, Matlab or Simulink • Experience in embedded software, C Programming or power supply circuit design • Demonstrate logical thinking and good presentation skills

Company	Toshiba Infrastructure Systems & Solutions Corporation (TISS)
Job No.	205542
Position	Sales Engineer – Railway Rolling Stock System
Location	Fuchu, Tokyo
Products	Railway Rolling Stock System and Electric Locomotive
Internship Project	• Manage engineering project for rolling stock business including, but not limited to, electrical equipment for rolling stock and electric locomotive. • Identify customer requirements and negotiate to achieve win-win results. • Product planning and development
	You will gain the following: • Knowledge of customer and market. • Knowledge of basic technology for Rolling stock or Electric Locomotive • Knowledge of train driving simulation
Requirements	• Bachelor's or higher degree in Electrical and Electronic Engineering or related field. • Demonstrated leadership and negotiation skills • Excellent verbal and written communication skills in English • Knowledge and skills in marketing a plus • Native or Native-like level of language proficiency in Mandarin Chinese, French, German or Korean a plus

Elevator & Escalator Business Domain

Aiming to Create Safe and Pleasant Elevators with advance Technology and Quality. Toshiba Elevator and Building Systems Corporation has built a framework that encompasses all aspects of Toshiba's elevators from product and system development to production, installation, adjustment, maintenance and services in order to provide our customers with the highest quality products and services.

For 130 years since the first elevator appears, we aim to further enhance the world-leading technology and quality that enabled us to develop ultra-high speed elevator, harnessing the full range of Toshiba's technological innovations. To respond to customers' expectations and requirements for safe and pleasant elevators, we are constantly pursuing further innovation and improvement.

Related link: Toshiba Elevator and Building Systems Corporation

Company	Toshiba Elevator and Building Systems Corporation (TELC)
Job No.	205510
Position	Overseas Technical Planner - Lift & Escalator
Location	Kawasaki, Kanagawa
Products	Lift & Escalator
Internship Project	Overseas Product Planning for Elevator & Escalator • Participate in the on-going planning project • Responding to questions and requests from overseas business partners
	You will gain the following: • Understanding the process and key success factors as a technical planner • Real work experience in a Japanese company and Toshiba's work culture
Essential Requirements	• Bachelor's or higher degree in Engineering • Knowledge of mechanical engineering or electrical engineering • Fluent in English AND Chinese languages
Preferred Capabilities	• Excellent negotiation skills • Knowledge or experience in marketing activities

Company	Toshiba Elevator and Building Systems Corporation (TELC)
Job No.	205526
Position	Software Engineer – Control System for Lift & Escalator
Location	Fuchu, Tokyo
Products	Lift & Escalator
Internship Project	Software development for Elevator control system • Participate in on-going projects to experience the real-work process of software development including basic design, coding, test and debug.
	You will gain the following: • Knowledge of the elevator and escalator industry • Knowledge of software development for Elevator control system • Communication skills between engineering specialist and related department
Essential Requirements	• Bachelor's or higher degree in computer science/engineering, control engineering, information engineer/ technology or related field. • Knowledge of software engineering. • Excellent English communication skill.
Preferred Capabilities	• Good negotiation ability • Knowledge for embedded software and embedded system • Knowledge for Electrical and Electronics Engineering.

Electronic Devices Business Domain

Electronic devices that are shaping our future

In the era of big data, you either sink or swim in the sea of information. In fact, state-of-the-art electronics are contributing more than ever, from cutting energy consumption to the control and operation of automobiles. Toshiba Group promotes advances in electronic devices that help everyone to live more comfortably and safely.

In the discrete semiconductor business, we focus on the power devices that control equipment power consumption. Our system LSI business offers ICs for IoT, automotive, communications and power supply applications. In the HDD business, we lead the way in large capacity enterprise HDDs for data centers and servers.

Related link: Toshiba Electronic Devices & Storage Corporation

Company	Toshiba Electronic Devices & Storage Corporation (TDSC)
Job No.	205557
Position	Application Engineer
Location	Kawasaki, Kanagawa
Products	Discrete Power Semiconductors for Power Management applications
Internship Project	Application test of latest power devices You will gain experience in the following: • Method of power device evaluation • Learning how to use measurement equipment and machines for devise evaluation • Writing of technical documents for power device and application.
Requirements	• Bachelor's or higher degree in electrical & electronics engineering, engineering science or semiconductor related field. • Knowledge of power semiconductors and application circuits. • Excellent English communication skills
Desired Characteristics	• Excellent written and oral communication skills to convey technical concepts to business and technical personnel. • Ability to effectively influence and motivate others • Self-starter of knowledge regarding electrical engineering • Strong team-building and communication skills • Good attention to detail.

R&D Intern Positions

Corporate Research & Development Center

An engine of technological innovation constantly seeking new challenges, the Corporate Research & Development Center is the source of Toshiba's ability to advance hand in hand with people the world over toward a better, brighter future. Our mission is to create new products and systems that enrich the quality of life and invigorate society. Turning new knowledge and inventions into forms that serve the needs and aspirations of individuals and society is what innovation is all about. By linking exciting new discoveries and creativity to innovations, we aim to be a source of "Delight and Surprise" bringing people new empowering experiences underpinned by "Safe and Sound."

Related link: Corporate Research & Development Center

Division	Corporate Research & Development Center
Job No.	205491
Position	Researcher - Computer Vision and Speech Recognition
Location	Kawasaki, Kanagawa
Products	Computer Vision and Speech Recognition
Internship Project	Interns will participate in research on computer vision and speech recognition such as following topics. • computer vision and image understanding • environment recognition for autonomous driving • path and action planning for autonomous robots • training and evaluating modeling methods for a spoken dialogue system
	You will gain experience in the following: • Better understanding of research in computer vision or speech recognition via discussing our expert researchers. • Team working on research and development issues. • Practical experiences with machine learning tools, such as Python and Deep Learning framework.
Essential Requirements	• Master's or higher degree in a major related to computer vision and pattern recognition such as computer science/engineering, electrical & electronic engineering, information technology, mathematics, or mechanical engineering • Research experience and good knowledge of computer vision, pattern recognition and reinforcement, including machine learning or geometry • Experience of programming using C, C++ and Python • Excellent English communications skills
Preferred Capabilities	• Knowledge of related technical areas, such as computer architecture, the user interface, and embedded programming • Good presentation skills

Division	Corporate Research & Development Center
Job No.	205535
Position	Researcher - Data Analytics System & Service
Location	Kawasaki, Kanagawa
Products	Data Analytics System & Service
Internship Project	Interns will participate in a data analytics research group. • Conduct literature survey on image or signal analysis using machine learning /deep learning for given task. • Prepare for experiments by gathering, modifying and implementing source codes from selected methods in the above literature. • Compare conventional methods theoretically and experimentally. • Propose and discuss new ideas with team to solve a limitation of the conventional methods.
	You will gain experience in the following: • Understanding of the research process in Toshiba • Problem solving techniques and team work with Japanese researchers
Essential Requirements	• Master's or higher degree in Computer Science • Software development skills (C, C++, Python) • Knowledge of machine learning, data analysis, pattern recognition, or data mining. • Experience of data processing and analysis. • Presentation experience in international conferences • Excellent English communication skills
Preferred Capabilities	• Experience on R&D of signal or image analysis with deep learning a plus

Corporate Software Engineering & Technology Center

Division	Corporate Software Engineering & Technology Center
Job No.	205520
Position	Researcher – Linux, Database or Web Application Framework
Location	Kawasaki, Kanagawa
Products	System software and middleware
Internship Project	The intern will be assigned to one of following research topics based on mutual discussion. **Research Topic 1: Linux** The intern will be provided a Linux-based embedded computer with modern Linux installed and internet access during the internship and expected to complete the mission of researching the following topics: 1) Survey for real-time embedded operating systems for industrial IoT systems 2) Performance evaluation for multi operating system environment with hardware partitioning technology

	Research Topic 2: web application frameworks/ libraries 1) Evaluation of high speed rendering technology such as WebGL, WebAssembly, WebWorker and middleware development by using these technologies 2) Evaluation of WebRTC and middleware development by using this technology
	You will gain experience in the following: Research Topic 1: Linux • Understanding of product development for next generation industrial IoT devices and services in Toshiba, using open source software • Problem solving techniques through collaboration with team members and open source community Research Topic 2: web application frameworks/ libraries • Knowledge and programming experience, evaluation method of new web technology
Essential Requirements	• Master's or higher degree in computer science, information engineering/ technology or related field. • Fluent in at least one of the following programming languages: C/C++, Java, JavaScript, or Python. • Knowledge of and interest in operating systems or database architectures or Web application frameworks/libraries • For the Linux team, experience in open source software development. • For the database team, experience C and C++ and experience of working in Unix and Linux environments, database development, networking, or security. • For web application frameworks,　libraries team, experience and knowledge in HTML, CSS, JavaScript, Java, network protocols such as HTTP, WebSocket, and TCP/UDP
Preferred Capabilities	• Experience in Linux kernel development or database development. • Experience in multi-process programming • Interest in and ability to learn other programming languages (e.g.: python, Perl or shell script) • In Web application frameworks/libraries

Corporate Manufacturing Engineering Center

The Corporate Manufacturing Engineering Center is the laboratory of research and development division that is researching and developing technology, technique, structure and system to make the products of the Toshiba group efficiently with high quality and low cost and provide the products to customers timely.

We enlarge the activity territory more recently, promote innovation of various operations and does not remain in efficient product development and design methods, installation and setting methods of products made in factories, maintenance methods of products which customers use, production and manufacturing to sell to customers.

Every day, we continue expanding the activity territory while aiming at "the center revolutionizing processes" to improve all productivity and quality of the business from a research laboratory or a center for production and production of the Toshiba group.

Related link: Corporate Manufacturing Engineering Center

Division	CMC
Job No.	205543
Position	Manufacturing R&D Engineer – Optical Technology, AI & Image Processing
Location	Yokohama, Kanagawa
Internship Project	R&D of automatic image inspection using AI and image processing Understanding of Toshiba's research and development process and technical solutions. Problem solving techniques and team work.
Essential Requirements	• Master's or higher degree in Applied Sciences, Computer Science, Computer Engineering, or Information Engineering/ Technology • Advanced programming skills in C++ or Python • Practical experience of image processing • Excellent English communication skills
Preferred Capabilities	• Knowledge of AI and machine learning • Knowledge of optics • Practical experience of software development or data analysis a plus