

# Baber Rehman

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## SUMMARY

I wish to play the leading role in the well-being of the humanity. Love to explore what's happening in the box instead of seeing things as a black box. Have a quality to work and adjust in dynamic environments.

# ACADEMICS

2018 - present   PhD in Computer Science at **University of Hong Kong**, Hong Kong

Research Area : Programming Languages, Type Systems

Primary Supervisor : Bruno C. d. S. Oliveira

2011 - 2015 Bachelor's Degree at **University of Punjab**, Lahore, Pakistan (CGPA: 3.81/4.0)

Major : Computer Science

2007 - 2009      Class 12th at BISE Abbottabad, Pakistan

(81%)

2009 - 2011      Class 10th at BISE Abbottabad, Pakistan

(80%)

## PROFESSIONAL EXPERIENCE

Resident Tutor

Jan 2021 - present

New College, The University of Hong Kong

- Duties include to maintain a lively environment for the students and assist them where needed, both academically and socially. Main ethos of New College includes to produce responsible citizens of the world

## Junior Resident Tutor

Sep 2019 - Dec 2020

New College, The University of Hong Kong

- Duties include to maintain a lively environment for the students and assist them where needed, both academically and socially. Main ethos of New College includes to produce responsible citizens of the world

## Senior Software Engineer (DevOps) – Team Lead

May 2017 - Aug 2018

CloudPlex PVT LTD, Lahore, Pakistan

- Lead one local team in Lahore and one remote located in Argentina
- Conducted technical interviews of candidates for the backend team
- Held meetings with clients for requirement gathering, demos, and delivery
- Build a cloud platform to automate cloud orchestration and deployment
- Worked with AWS and Azure cloud services including VPC, S3, EC2, VNet
- Worked on automating the configuration of firewalls (Pfsense and Fortinet)
- Tools and technologies: Golang, Chef, Ansible, Networking, Docker, Shell scripting, Cloud Computing

**Software Engineer (DevOps)**

Jun 2015 - Apr 2017

**Platalytics Inc. (CloudPlex PVT LTD), Lahore, Pakistan**

- Conducted technical interviews of candidates for the backend team
- Held meetings with clients for requirement gathering, demos, and delivery
- Build a cloud platform to automate cloud orchestration and deployment
- Worked with AWS and Azure cloud services including VPC, S3, EC2, VNet
- Worked on automating the configuration of firewalls (Pfsense and Fortinet)
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**Visiting lecturer**

Oct 2015 - Jun 2016

**University of the Punjab, Lahore, Pakistan**

- Fall 2015: Computer organization and Assembly Language course
- Spring 2016: Enterprise Application Development course (C#/MVC4)

**Intern**

Jul 2014 - Sep 2014

**Mentor Graphics, Lahore, Pakistan**

- Worked in Java programming language and used eclipse as a tool
- Explored Java GUI library i.e. SWT
- Did debugging of source code of Sourcery Codebench (an eclipse based IDE used in Mentor Graphics) and removed few of its GUI bugs

**Teacher Assistant**

Oct 2013 - Jul 2015

**University of the Punjab, Lahore, Pakistan**

- Discrete Mathematics
- Data Structures and Algorithms
- Database Systems
- System Programming
- Enterprise Application Development

**Research Assistant**

Jun 2013 - Oct 2013

**AIM Lab, University of the Punjab, Lahore, Pakistan**

- Worked with business process management research repository

## TECHNICAL SKILLS

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Golang	Coq Theorem Prover
Scala	Amazon Web Service (EC2, VPC, S3, RDS)
Haskell	Microsoft Azure (VNet, Virtual Machines)
Chef / Ansible	Computer Networking / VPC / VPN / PfSense
Docker / Kubernetes	Jenkins / Git
Micro-services / API's	Mongo DB
Bash / Python / Ruby	

## COMMUNITY SERVICE

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- ❖ Accepted invitation to serve as AEC in ECOOP 2023
- ❖ Artifact Evaluation Committee POPL 2023

- ❖ Artifact Evaluation Committee APLAS 2022
- ❖ Artifact Evaluation Committee ECOOP 2022
- ❖ Extended Review Committee ECOOP 2022
- ❖ Student Helper PLDI 2021

## SCHOLARSHIPS

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- ❖ Funding by ACM PLMW@ICFP to attend ICFP'19 in Berlin, Germany
- ❖ Pilot Scheme Funding by the University of Hong Kong to attend OPLSS'19 in Eugene, USA
- ❖ Partial funding by OPLSS'19 to attend OPLSS'19 in Eugene, USA
- ❖ University Postgraduate Fellowship for 4-years PhD by the University of Hong Kong (2018 – 2022)
- ❖ Merit Base Scholarship three times by PUCIT, University of the Punjab

## KEY ACHIEVEMENTS

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- ❖ Promoted to Senior Software Engineer and Team Lead after two years of professional experience at Platalytics Inc., Lahore, Pakistan which normally takes three years.
- ❖ 2nd position (2/191) in BS Computer Science (Batch 2011 – 2015) at PUCIT, University of the Punjab, Lahore, Pakistan.
- ❖ 2nd position in Belal Hashmi programming competition SOFTEC'15 ACM-ICPC held in FAST-NU Lahore (Team Code:Threads).
- ❖ 2nd position in speed programming competition SOFTEC'14 ACM-ICPC held in FAST-NU Lahore (Team Code:Threads).
- ❖ 2nd position in speed programming competition APTA'14 held in GCU Lahore (Team Code:Threads).

## EXTRA CURRICULAR / SOCIAL ACTIVITIES

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- ❖ Postgraduate Student's Representative at the Department of Computer Science, University of Hong Kong (Sep 2018 – Aug 2019)
- ❖ Member of Postgraduate Task Force on Accommodation Needs, Graduate School, University of Hong Kong (Oct 2018 – Aug 2019).
- ❖ Founding Member at Ghoomo Phiro Pakistan Adventure Club (Dec 2014 – Aug 2018)
  - Ghoomo Phiro Pakistan Adventure Club was established in 2014. The main idea behind this company is to promote tourism and cultural diversity in Pakistan. We successfully have organized many tours in the northern areas of Pakistan. Also we got funding from provincial Government of Khyber Pakhtunkhwa, Pakistan, for this purpose and we are working successfully as a team to achieve our objective.
- ❖ Class Representative at PUCIT, University of the Punjab (Oct 2013 – July 2015)
- ❖ Advisory Board Member at Blood Donor Society, PUCIT (Jan 2015 – July 2015)
- ❖ Vice president and Treasurer at Literary society, PUCIT (Oct 2012 – July 2015)
- ❖ BCSF11M cricket team player (Right Arm Medium Fast Bowler)

## PUBLICATIONS AND ARTIFACTS

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- S. Oliveira, Bruno C. d. et al. (2020a). “The Duality of Subtyping”. In: *34th European Conference on Object-Oriented Programming (ECOOP 2020)*. Ed. by Robert Hirschfeld and Tobias Pape. Vol. 166. Leibniz International Proceedings in Informatics (LIPIcs). Dagstuhl, Germany: Schloss Dagstuhl–Leibniz-Zentrum für Informatik, 29:1–29:29. ISBN: 978-3-95977-154-2. DOI: [10.4230/LIPIcs.ECOOP.2020.29](https://doi.org/10.4230/LIPIcs.ECOOP.2020.29). URL: <https://drops.dagstuhl.de/opus/volltexte/2020/13186>.
- (2020b). “The Duality of Subtyping (Artifact)”. In: *Dagstuhl Artifacts Series* 6.2, 8:1–8:6. ISSN: 2509-8195. DOI: [10.4230/DARTS.6.2.8](https://doi.org/10.4230/DARTS.6.2.8). URL: <https://drops.dagstuhl.de/opus/volltexte/2020/13205>.
- Rehman, Baber et al. (2022a). “Union Types with Disjoint Switches”. In: *36th European Conference on Object-Oriented Programming (ECOOP 2022)*. Ed. by Karim Ali and Jan Vitek. Vol. 222. Leibniz International Proceedings in Informatics (LIPIcs). Dagstuhl, Germany: Schloss Dagstuhl – Leibniz-Zentrum für Informatik, 25:1–25:31. ISBN: 978-3-95977-225-9. DOI: [10.4230/LIPIcs.ECOOP.2022.25](https://doi.org/10.4230/LIPIcs.ECOOP.2022.25). URL: <https://drops.dagstuhl.de/opus/volltexte/2022/16253>.
- (2022b). “Union Types with Disjoint Switches (Artifact)”. In: *Dagstuhl Artifacts Series* 8.2. Ed. by Baber Rehman et al., 17:1–17:6. ISSN: 2509-8195. DOI: [10.4230/DARTS.8.2.17](https://doi.org/10.4230/DARTS.8.2.17). URL: <https://drops.dagstuhl.de/opus/volltexte/2022/16215>.