## Baber Rehman







### **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 <b>University of Hong Kong</b> , Hong Kong		
	Research Area:	Programming Languages, Type Systems,	
		Functional Programming, Object-oriented Programming	
	Supervisor:	Dr. Bruno C. d. S. Oliveira	
2011 - 2015	Bachelor's Degree at <b>University of Punjab</b> , Lahore, Pakistan (CGPA: 3.81/4.0) Major: Computer Science		
2007 - 2009	Class 12th at BISE Abbottabad, Pakistan (81%)		(81%)
2009 - 2011	Class 10th at BISE Abbottabad, Pakistan (80°		(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 team 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
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- Tools and technologies: Golang, Chef, Ansible, Networking, Docker, Shell scripting, Cloud Computing

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

Functional Programming Object-oriented Programming Type Theory Coq Theorem Prover / Gallina

Golang Amazon Web Service (EC2, VPC, S3, RDS)
Scala Microsoft Azure (VNet, Virtual Machines)
Haskell Computer Networking / VPC / VPN / PfSense

Chef / Ansible Jenkins / Git
Docker / Kubernetes Mongo DB / SQL

Bash / Python / Ruby

# COMMUNITY SERVICE

❖ 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**

- ❖ 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

- 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 (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

- ❖ 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

- Baber Rehman, Xuejing Huang, Ningning Xie and Bruno C. d. S. Oliveira. 2022. "Union Types with Disjoint Switches". In *European Conference on Object-Oriented Programming (ECOOP)*.
  - Baber Rehman, Xuejing Huang, Ningning Xie and Bruno C. d. S. Oliveira. 2022. "Union Types with Disjoint Switches (Artifact)". In European Conference on Object-Oriented Programming (ECOOP).
- Bruno C. d. S. Oliveira, Cui Shaobo and Baber Rehman. 2020. "The Duality of Subtyping". In *European Conference on Object-Oriented Programming (ECOOP)*.
  - Bruno C. d. S. Oliveira, Cui Shaobo and Baber Rehman. 2020. "The Duality of Subtyping (Artifact)". In *European Conference on Object-Oriented Programming (ECOOP)*.

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